

and

**PITTSBURGH CORNING
CORPORATION**

Don Graf's PENCIL POINTS Data Sheets

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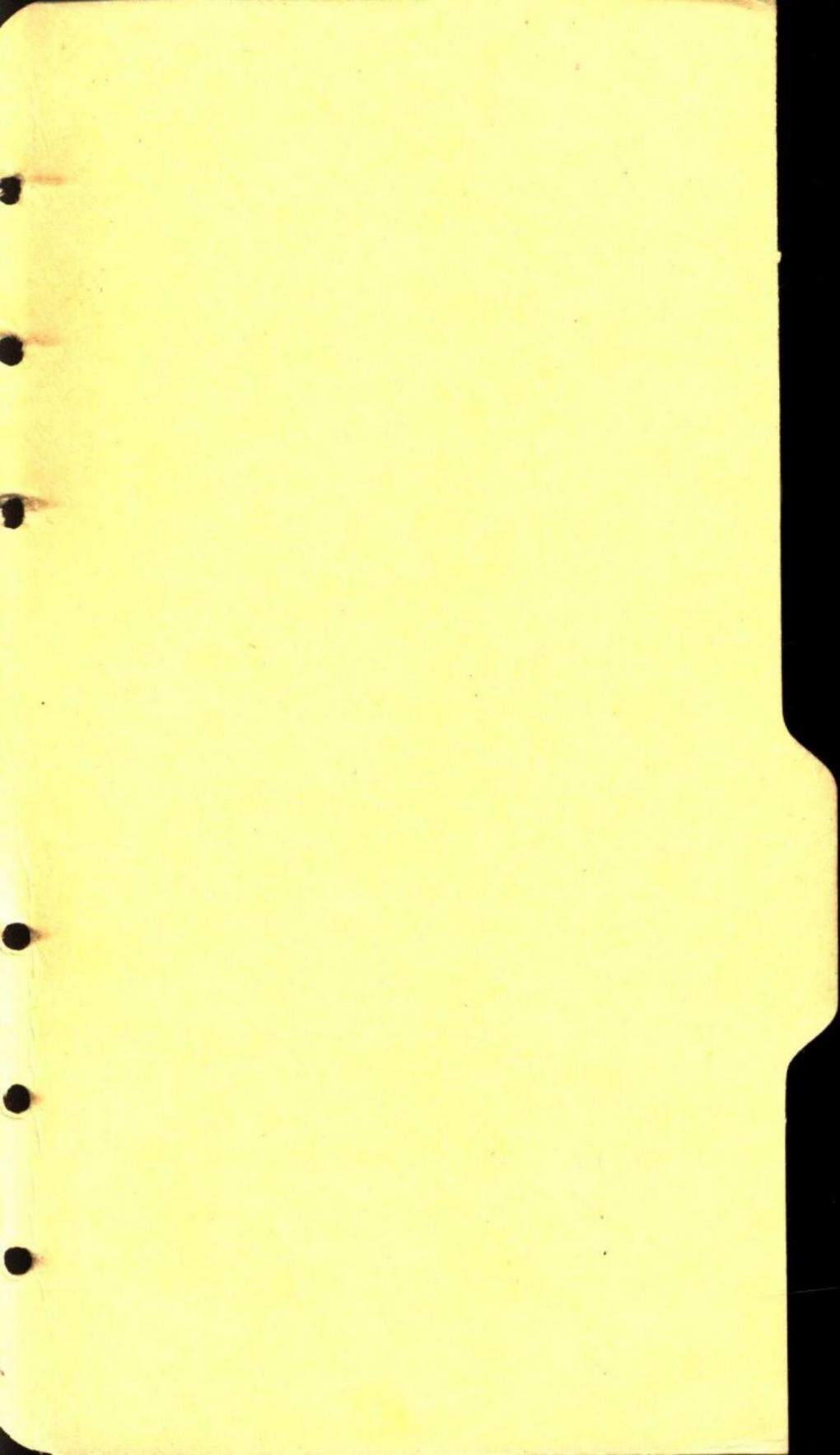
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CARRARA



CHARACTERISTICS OF CARRARA

CARRARA

Page 1

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH PLATE GLASS COMPANY

CHARACTERISTICS OF CARRARA. Carrara is strong and durable—a truly structural glass which is annealed to withstand rigorous use both indoors and out. It will not check, craze, stain or change color with age. It will not absorb odors of any kind. It is impervious to grease, grime, chemicals, oils, pencil marks. It is easily cleaned. It retains its brilliant luster. It is homogeneous and uniform in structure.

CARRARA COLORS. The Standard colors are Tranquil Green, Ivory, Gray, White, Black. Special colors are Wine, Blue, Orange, Green, Beige.

SURFACE FINISHES. Polished: Produced by mechanically grinding and polishing to a high luster. Suede: A less reflective finish mechanically imparted to soften reflections, available in all colors, $1\frac{1}{2}$ " thickness only.

BENT CARRARA. Bending of Carrara is subject to the same conditions as for Bent Glass, found in "Plate Glass" section of this Handbook.

MAXIMUM SIZE GOVERNED BY CONDITIONS OF USE. Except under severe conditions, interior panels may be used as large as 15 square feet. The maximum for toilet partitions is 25 square feet. The maximum for exterior installations is 10 square feet when below a line 15'0" above the sidewalk. Above the 15'0" line, the maximum size is 6 sq. ft.

SIZE LIMITED BY THE MATERIAL ITSELF. The standard stock sheet of Carrara is 6'0" x 10'-10". Laminated, sandblasted or carved ornamental work, not over 15 square feet. Standard ashlar are available in whole inch sizes only, minimum dimension 8", maximum dimension 16"

Uses	Usual Thickness Used	Wt. per sq. ft.	Colors Available	Finish ¹
Obscure Glazing	$\frac{1}{4}$ "	3.29	Black	1 or 2 sides polished
Ceilings Wainscot ²	$1\frac{1}{2}$ "	4.50	All colors	1 side polished or suede
Wainscot ² Store Fronts Strips, Caps, Bases ³ Bulkheads	$\frac{7}{16}$ " $\frac{3}{4}$ "	5.76 9.67	Black White T. Green ⁴ Ivory Gray	1 side polished
Laminated Partitions Solid Partitions Door & Window Trim Deal Plates	$\frac{7}{8}$ "	11.51		
Counter tops Toilet Lintels Toilet Stiles Shower Seats	$1\frac{1}{4}$ "	16.45		1 or 2 sides polished

¹Honed Finish available in Black, $1\frac{1}{32}$ " and thicker.

²Size of single pieces desired will determine thickness.

³Severity of service will determine thickness as $\frac{3}{4}$ " or $7/16$ ".

⁴Tranquil green not manufactured in $\frac{3}{4}$ " thickness.



CARRARA FOR INTERIOR WALL SURFACES

CARRARA

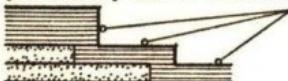
Page

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Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH PLATE GLASS COMPANY

11/32", 7/16", 3/4" & 7/8"
pieces of any color or thickness



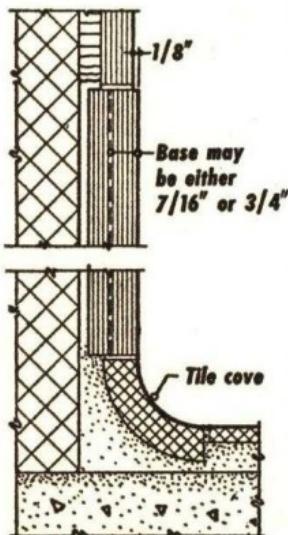
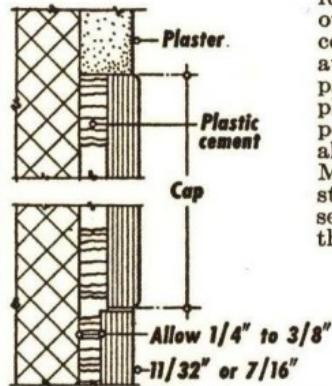
LAMINATED FOR REVEALS



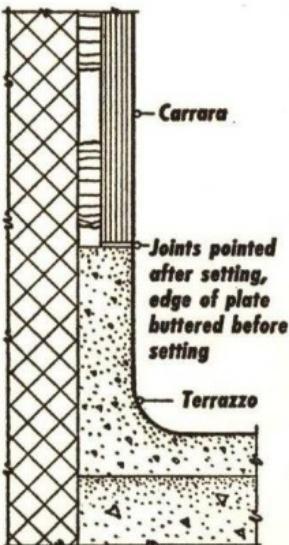
DECORATIVE EFFECTS. Carrara pieces in different colors can be laminated for special decorative effects. Pilasters and breaks can be created with reveals and offsets, as shown in the sketches. Carrara can be sandblasted with any design desired, bringing out the pattern either in shallow or deep relief. These designs may be further enriched by the application of gold, silver or color which is sprayed on at the factory. Sandblasted fluting has no depth—it is a surface shading to give the effect of fluting.

INSTALLATION IN NEW CONSTRUCTION. Masonry of almost any kind provides the necessary rigidity and strength required for background. Carrara may also be applied over lath and plaster on substantial frame construction. Wood background should be avoided. The entire background must be painted with a bond coat. Carrara is held in place by means of a plastic cement which bonds permanently with the glass and the wall, yet allows for settling, shrinkage and expansion. Mechanics installing Carrara Glass are instructed in the recommended methods of setting by the Pittsburgh Plate Glass Company, thereby insuring proper installation.

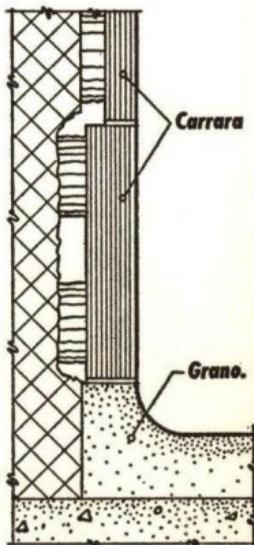
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CARRARA BASE
& TILE COVE



TERRAZZO
BASE & COVE



FLUSH CARRARA
BASE, GRANO, COVE

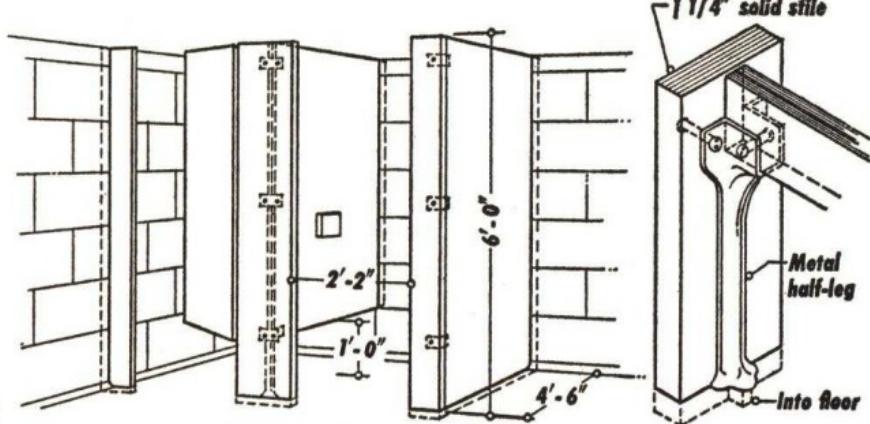
MANUFACTURED
BY THE
GENERAL
MFG. CO.

CARRARA TOILET ENCLOSURES (METROPOLITAN TYPE)

Page **3**

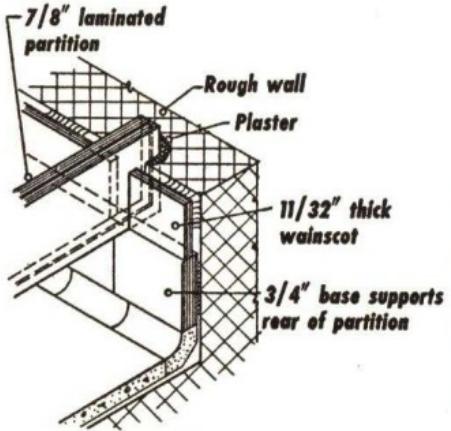
Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH PLATE GLASS COMPANY

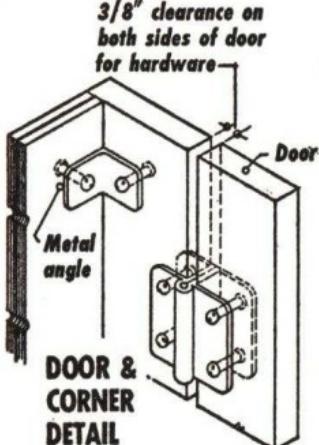


PERSPECTIVE

INTERIOR PARTITION
LOWER FRONT



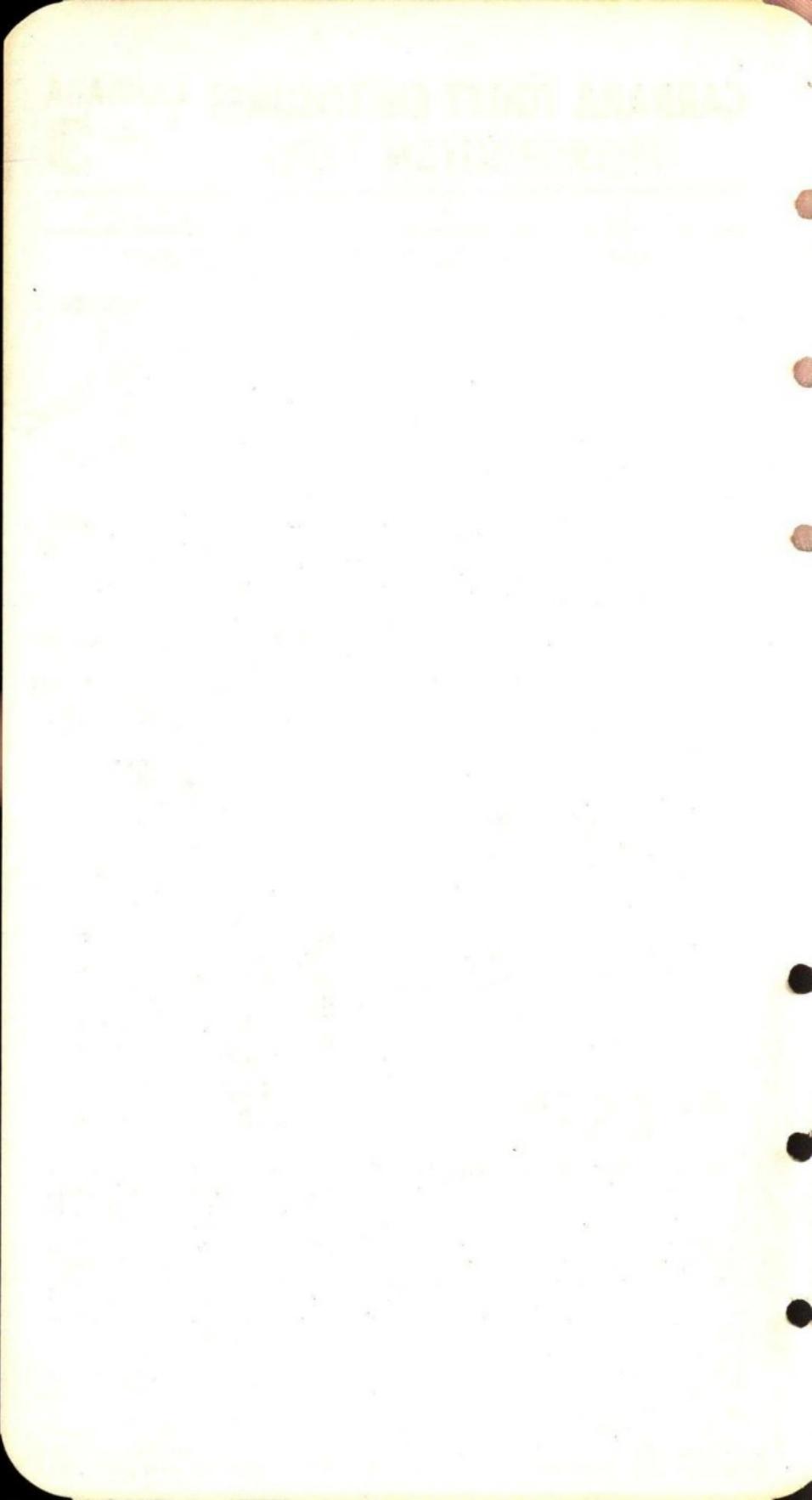
INTERIOR PARTITION
LOWER REAR



DOOR &
CORNER
DETAIL

CARRARA TOILET ENCLOSURES. Laminated toilet partitions consist of 2 pieces of $\frac{1}{16}$ " polished one side Carrara laminated back to back, with a rubber type adhesive in the center. Laminated partitions could be made to other thicknesses but are not because toilet partitions are almost exclusively specified $\frac{1}{8}$ " thick. No laminated glass should be used for enclosure fronts on which doors are attached and no laminated glass should be used where the edges will be exposed to view. (Horizontal edges 6'0" or more above the floor line are not considered as exposed.) The Pittsburgh Plate Glass Company supply all hardware necessary for the erection of Carrara, and will drill the slabs for any hardware or fixtures which they do not supply—such as hinges, strikes, etc.—provided they are furnished with the location and dimensions so that the drilling may be done at the factory. It should be remembered that Carrara is the ideal material for shower stalls.

A typical installation is shown in the drawing above. The erection hardware shown is available in plated bronze finish. In addition to the Metropolitan type illustrated, other types of toilet inclosures are available.



PITT CO

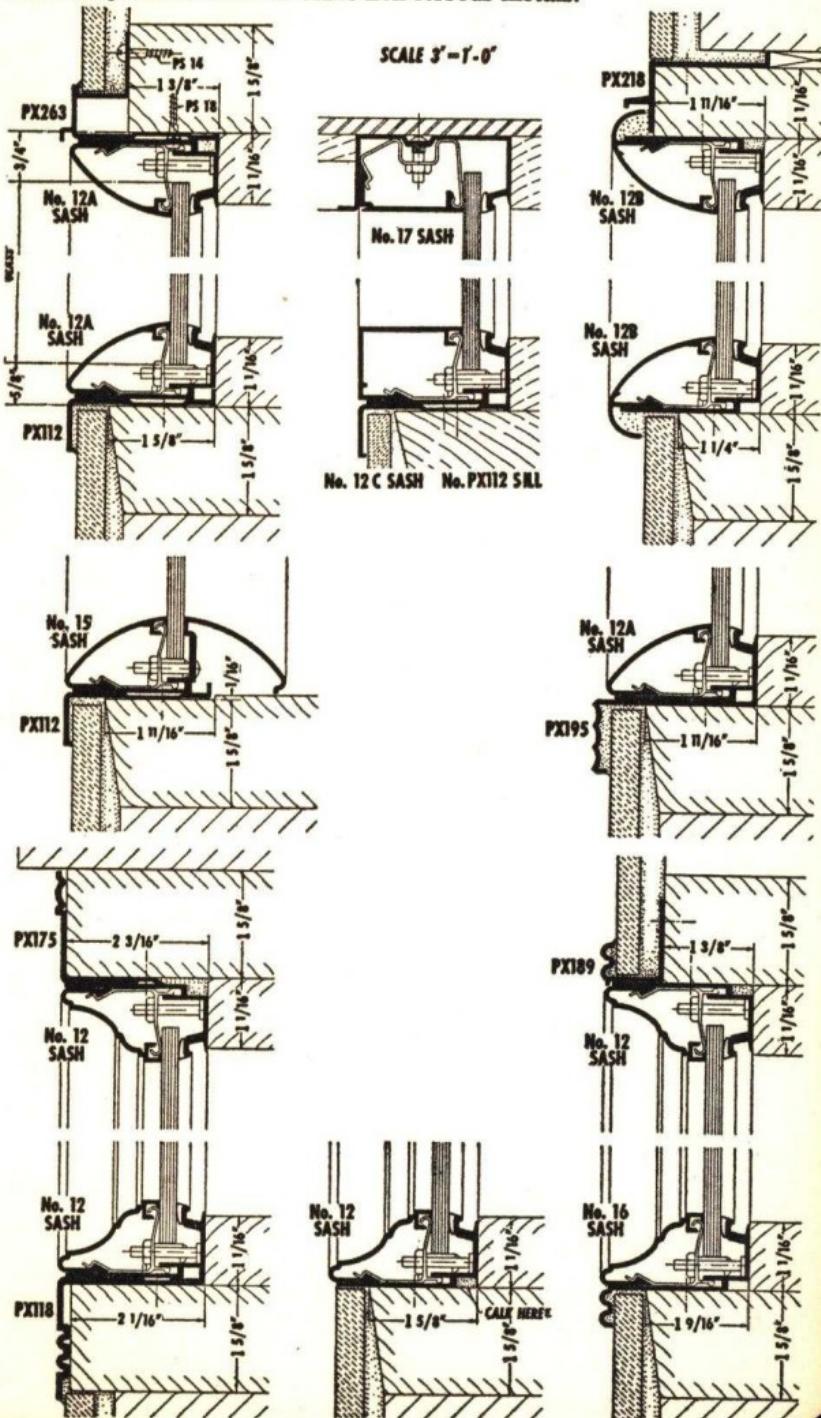
PITTCO DELUXE SILL DETAILS

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PITTSBURGH PLATE GLASS COMPANY

PITTCO DELUXE is now available in clear, lustrous Alumilite — may eventually be available in other non-ferrous metals.

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PITTCO DELUXE AWNING BAR DETAILS

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PITTSBURGH PLATE GLASS COMPANY

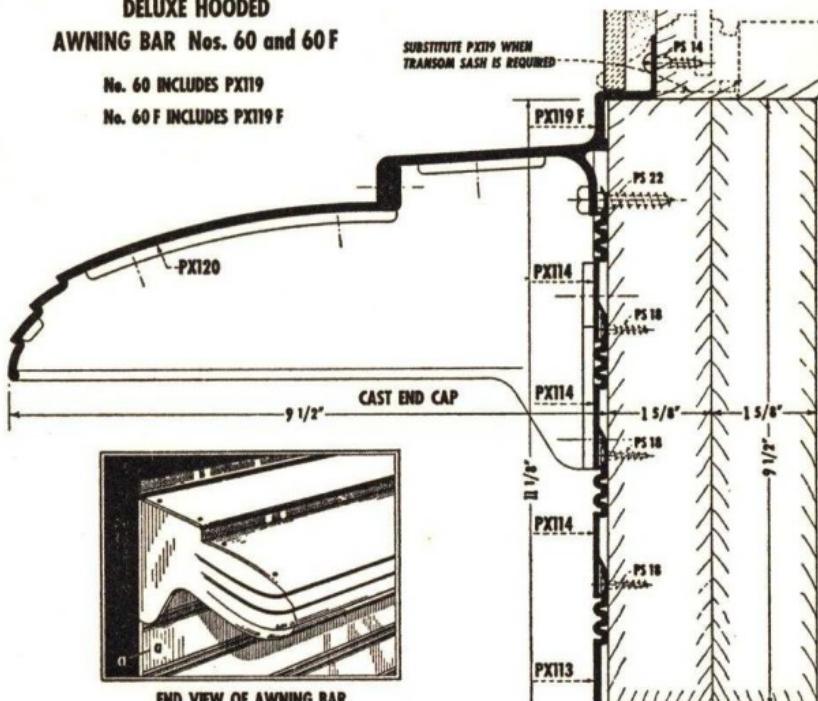
SCALE 3'-1"-0"

DELUXE HOODED AWNING BAR Nos. 60 and 60 F

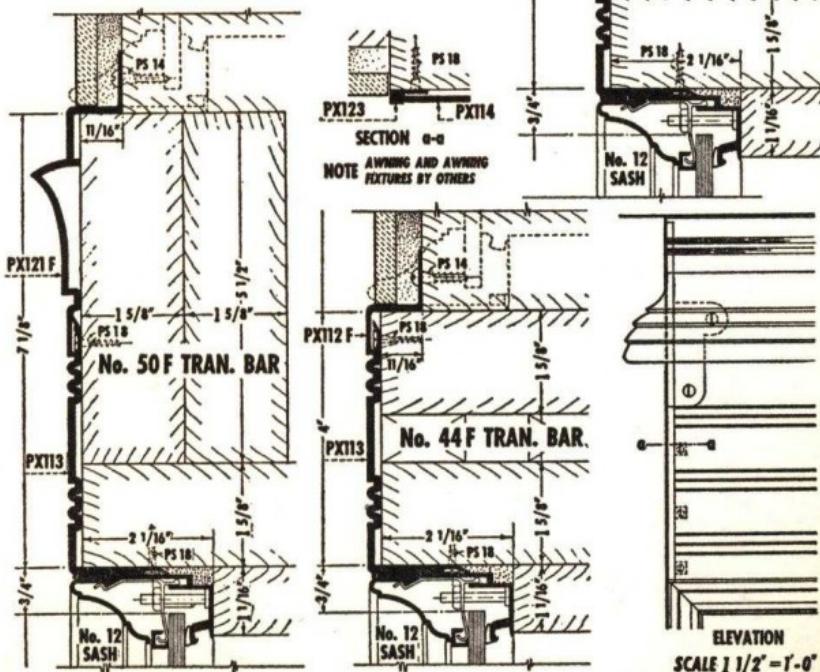
No. 60 INCLUDES PXI19

No. 60 F INCLUDES PXI19 F

SUBSTITUTE PXI19 WHEN
TRANSM SASH IS REQUIRED



END VIEW OF AWNING BAR



ELEVATION
SCALE 1 1/2"-1'-0"

PITTCO DELUXE DIVISION BAR DETAILS

PITTCO
METAL

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Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH PLATE GLASS COMPANY



No. 20
corner bar
150°

HALF SIZE

No. 30
reverse bar
150°



No. 30
reverse bar
90°

No. 34
3 way bar



Corner and reverse bars made in angles from 90° to 175°. Suitable anchors are available for all bars. The use of friction tape over full concealed edge of glass is recommended for all vertical bars.



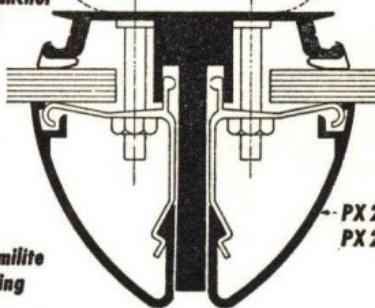
No. 20
corner bar
90°

2" x 2"
steel tube

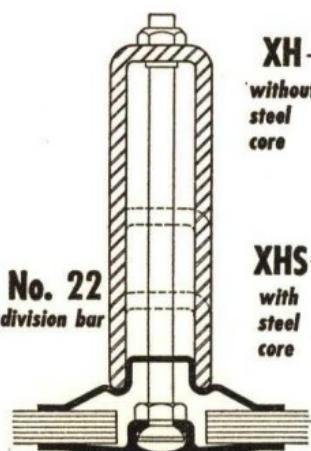
use anchor
PA 5

No. 24 division bar
without tube

No. 24 T division bar
with tube



-- PX 252 or
PX 250



No. 22
division bar

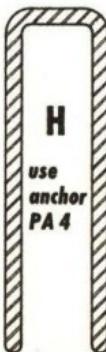
XH
without
steel
core

XHS
with
steel
core

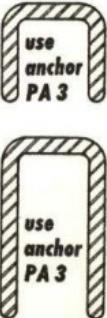


alumilite
casing

use
anchor
PA 4



H
use
anchor
PA 4



use
anchor
PA 3

L

M

BAR REINFORCEMENTS Specify by letter

SILVER
MATERIAL

BRASS DOME
COPPER CO. 100%

ROD 1/4" X 1/4" X 12" 100 FT.

YARD 1/4" X 1/4" X 12" 100 FT.

1/4" X 1/4"

1/4" X 1/4"

ROD 1/4" X 1/4" X 12" 100 FT.

YARD 1/4" X 1/4" X 12" 100 FT.

1/4" X 1/4"

1/4" X 1/4"

ROD 1/4" X 1/4" X 12" 100 FT.

YARD 1/4" X 1/4" X 12" 100 FT.

1/4" X 1/4"

1/4" X 1/4"

ROD 1/4" X 1/4" X 12" 100 FT.

YARD 1/4" X 1/4" X 12" 100 FT.

1/4" X 1/4"

1/4" X 1/4"

ROD 1/4" X 1/4" X 12" 100 FT.

YARD 1/4" X 1/4" X 12" 100 FT.

1/4" X 1/4"

1/4" X 1/4"

ROD 1/4" X 1/4" X 12" 100 FT.

YARD 1/4" X 1/4" X 12" 100 FT.

1/4" X 1/4"

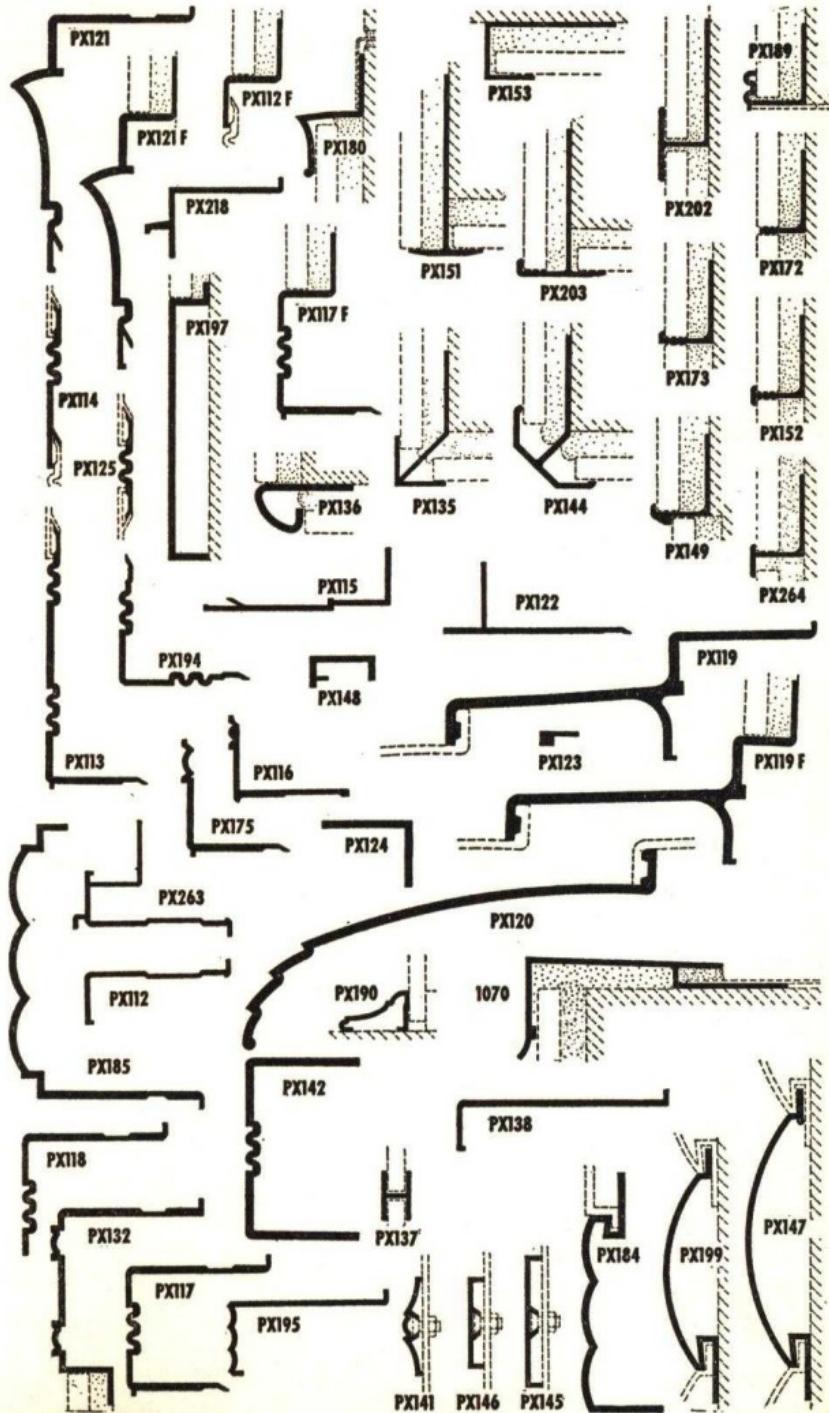
1/4" X 1/4"

PITTCO DELUXE EXTRUDED SHAPES

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH PLATE GLASS COMPANY

SCALE 3' = 1'-0"



PITTCO PREMIER SHAPES

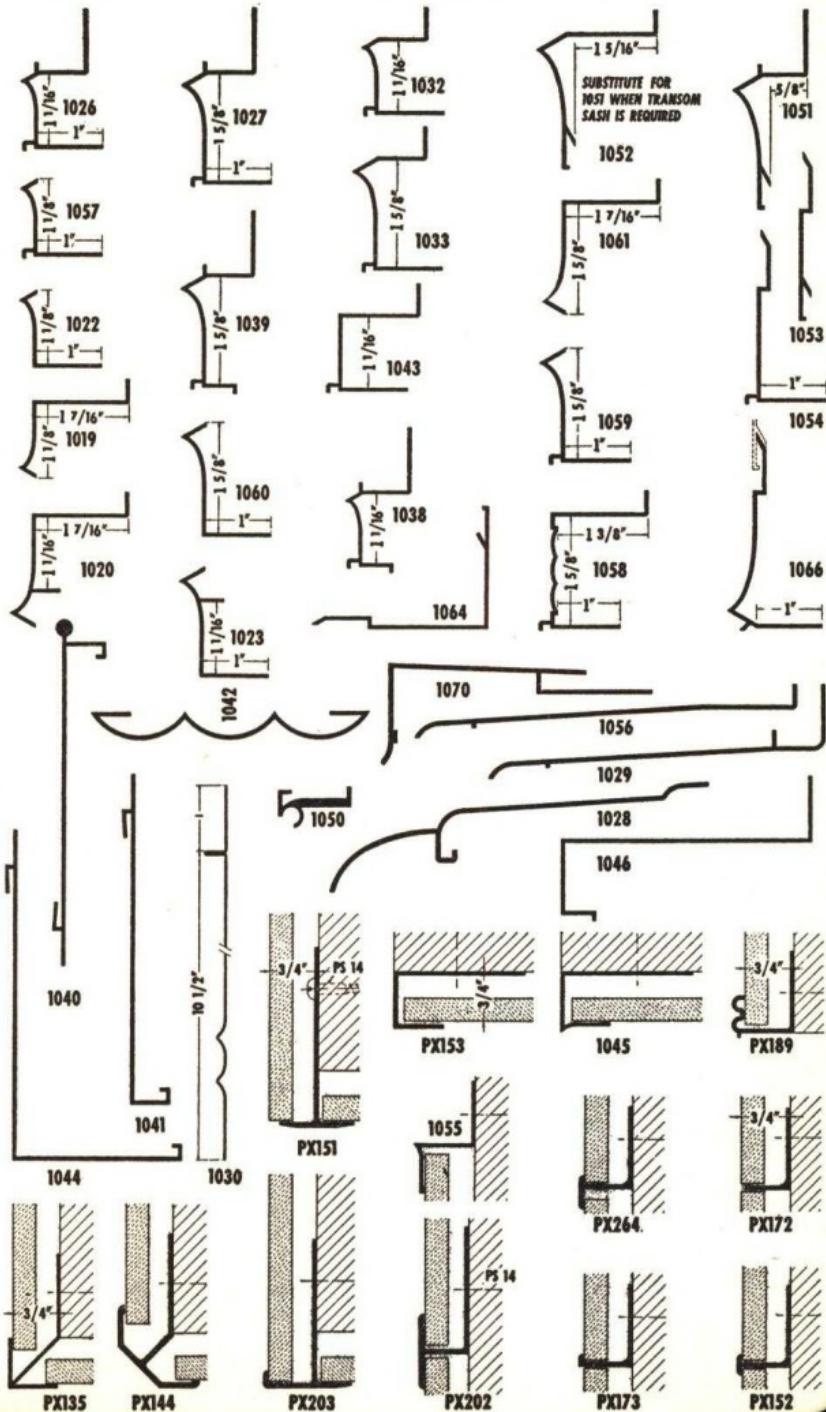
Pittsburgh DATA SHEET HANDBOOK

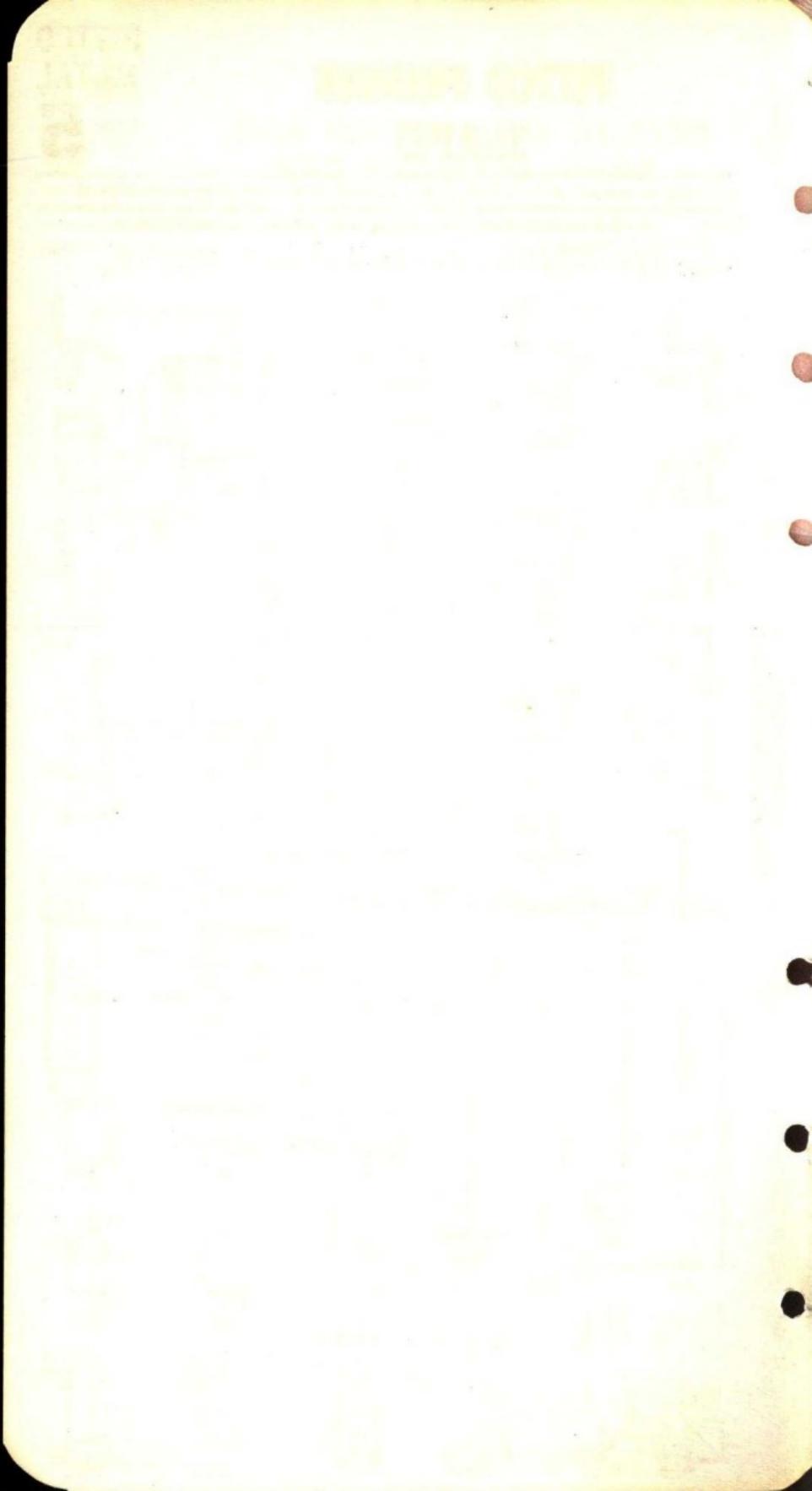
PITTSBURGH PLATE GLASS COMPANY

PITTCO PREMIER is now available in clear, lustrous Alumilite — may eventually be available in other non-ferrous metals.

SCALE 3'-0"

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PITTCO PREMIER

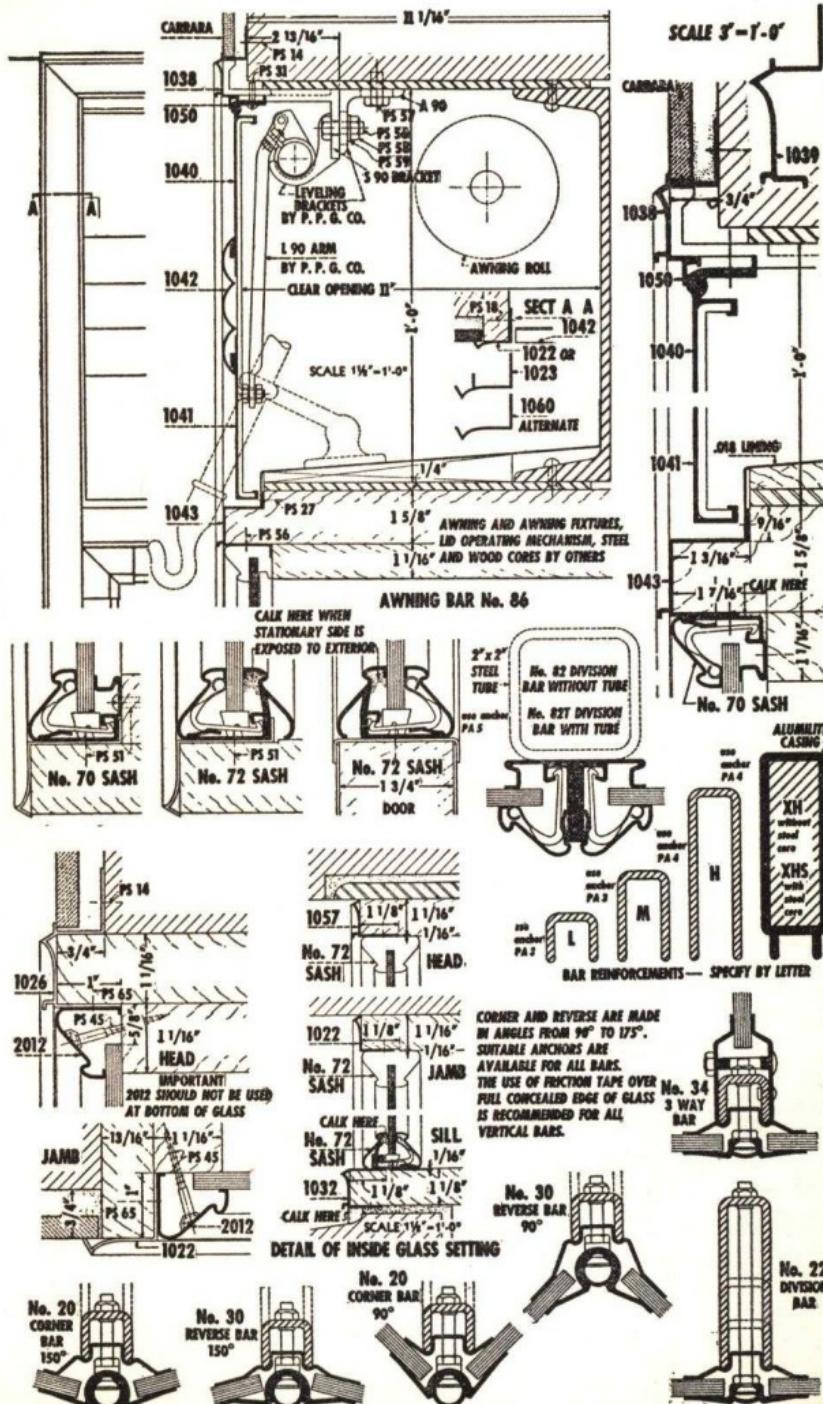
DETAILS OF AWNING BAR, SASH, DIVISION BAR

PITTCO
METAL

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PITTSBURGH PLATE GLASS COMPANY



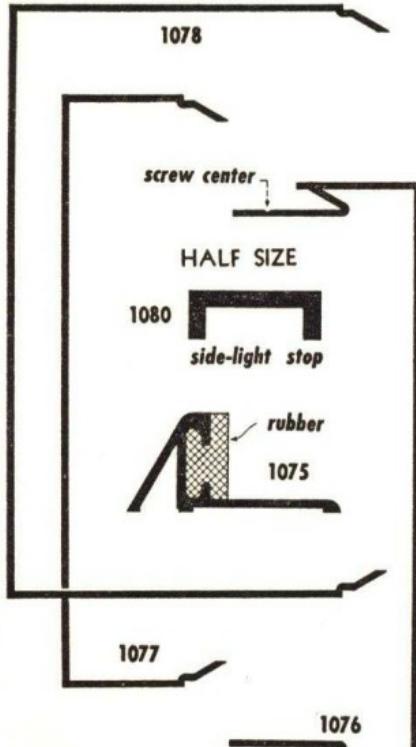
ON THE
DATE

RECORDED BY

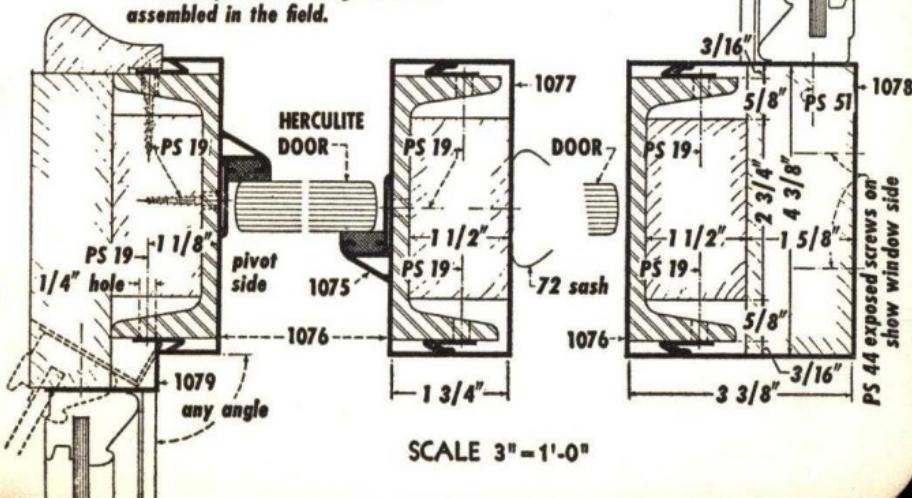
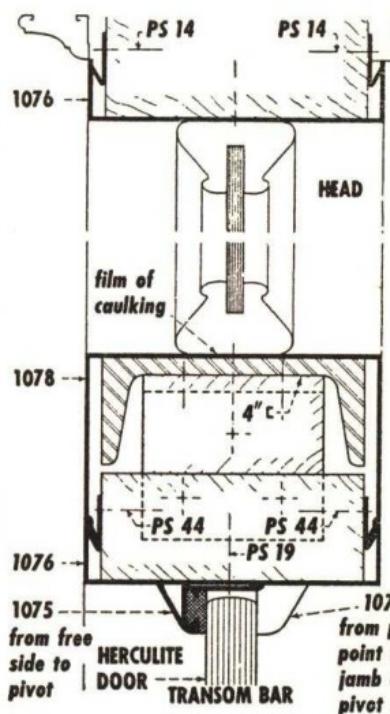
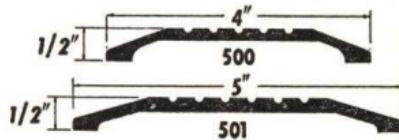
PITTCO EXTRUDED SHAPES FOR HERCULITE DOORS

Pittsburgh DATA SHEET HANDBOOK

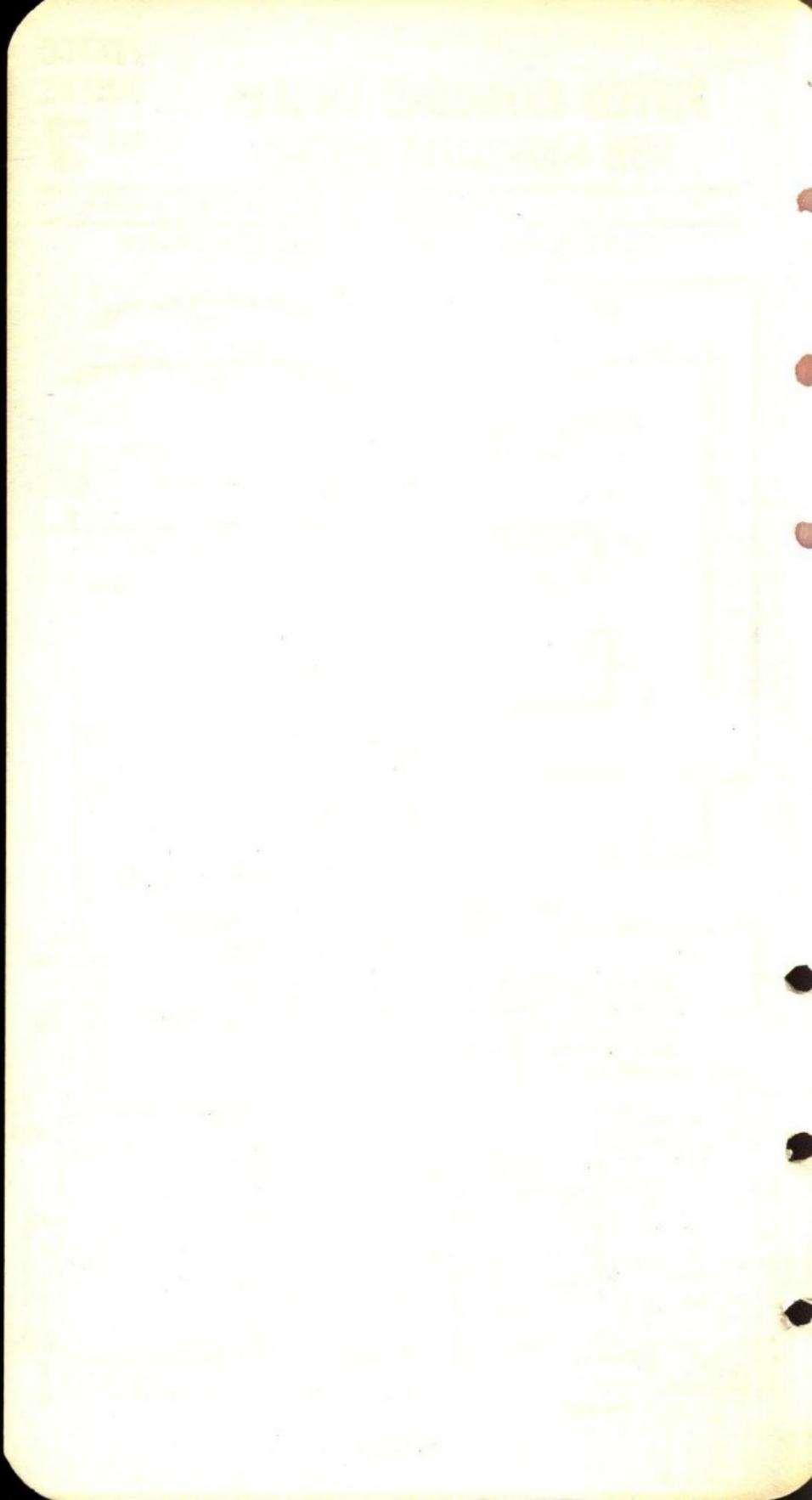
PITTSBURGH PLATE GLASS COMPANY



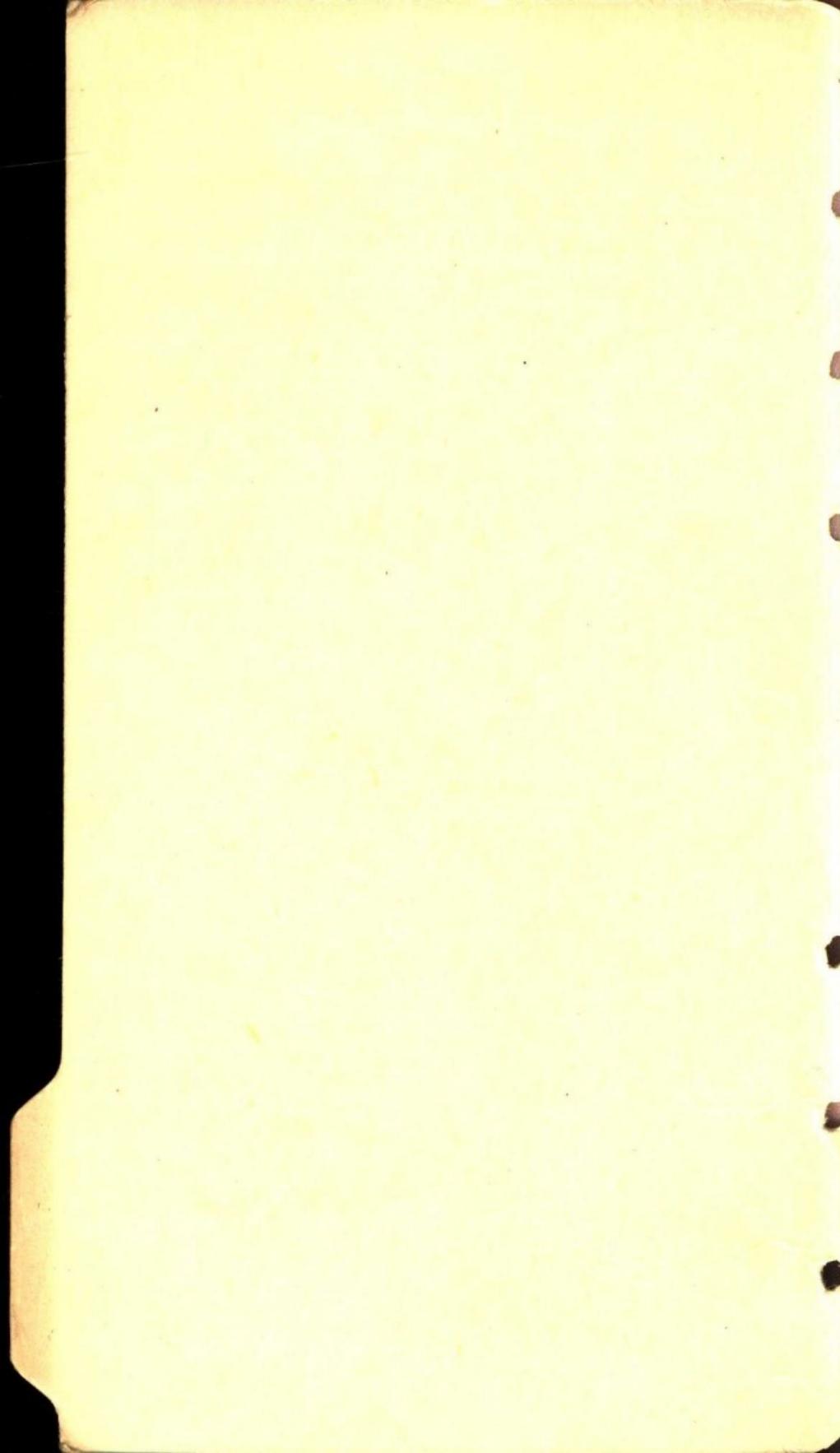
Shown on this sheet are but a few of the many combinations possible from the shapes illustrated. These shapes were designed to be assembled in the field.



SCALE 3" = 1'-0"



PC GLASS BLOCKS



DESCRIPTION & PROPERTIES PC GLASS BLOCKS

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH CORNING CORP., PITTSBURGH

WHAT ARE PC GLASS BLOCKS? Pittsburgh Corning Corporation glass blocks are hollow "all glass" units with fused glass to glass seals made at high temperatures, relatively free from entrapped water vapor. Each block contains a sealed-in dead-air space that is an effective heat retardant.

CRUSHING STRENGTH. Glass block panels should never be used to carry loads other than their own superimposed weight within the limits of allowable panel sizes. PC Glass Blocks have unusual strength in compression but such factors as non-uniform distribution of load forbids their use as a load-bearing material.

BOND TO MORTAR. All bonding surfaces are coated with a plastic material providing a strong, permanent bond between the cement mortar and the glass.

LIGHT TRANSMISSION. PC Glass Blocks are made of clear colorless glass of proven durability. The light which streams through them is of full daylight tone. With proper selection of pattern you can obtain an abundance of diffused daylight or efficient control of the transmitted light.

HEAT INSULATION. An advantage of glass block construction over single glazed window construction is its lower heat loss, due largely to the dead-air space within the blocks. Over-all coefficients of heat transfer "U" are as follows:

B.T.U./sq.ft./hr./degree F.

- | | |
|----------------------------|---------------------------|
| (a) Still Air conditions: | Rib Face Blocks = 0.38 |
| | Smooth Face Blocks = 0.40 |
| (b) 15 Mile Per Hour Wind: | Rib Face Blocks = 0.46 |
| | Smooth Face Blocks = 0.49 |

SOLAR HEAT GAIN. The use of glass blocks for light-transmitting areas results in a marked reduction in the total solar heat gain as compared with ordinary windows. This factor is of considerable advantage in buildings that are properly air conditioned, but does not eliminate the need for adequate ventilation or shading in non-air-conditioned rooms.

Based upon extensive tests, suggested figures for design computations are a maximum hourly rate of 41 B.T.U. and maximum daily rate of 250 B.T.U. total heat gain per square foot of glass block panel on South exposure, 40 degrees North Latitude for August 1.

More complete data on solar radiation appear in the current Guide of the American Society of Heating and Ventilating Engineers.

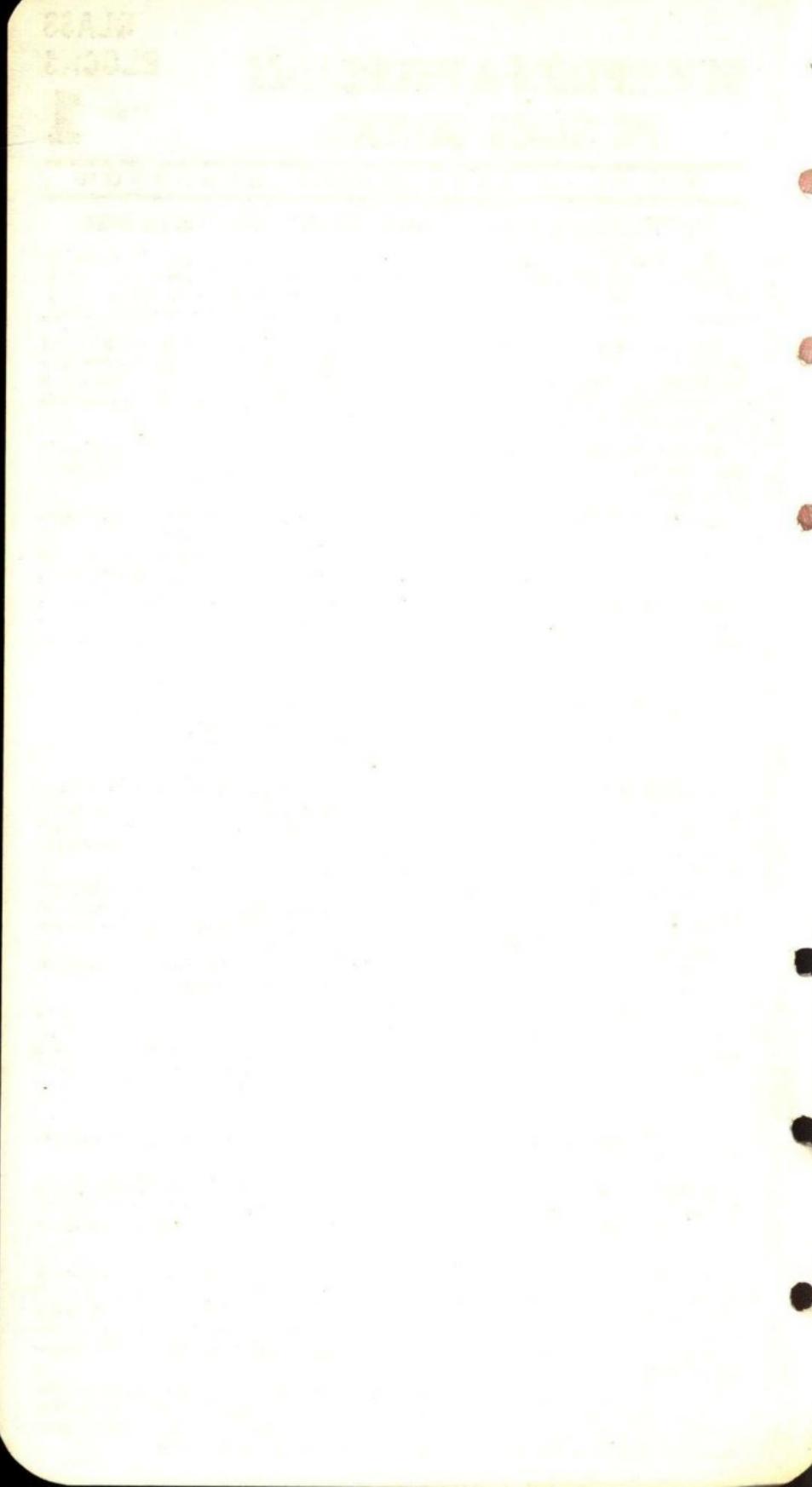
SURFACE CONDENSATION. Tests show that moisture will not condense on the warm side of PC Glass Block panels in normal use even under conditions of extreme exposure. In those special industries or cases where the inside temperatures and humidities are higher than normal, humidities considerably greater than those used with single glazed sash can be used before condensation will form.

SOUND INSULATION. Glass block panels have a sound reduction factor of 37.6 to 42.0 decibels.

WIND RESISTANCE. From tests on many PC Glass Block Panels it has been found that any panel, within the area limits recommended, will withstand a safe load of 20 lbs. per sq. ft. with a factor of safety of at least 2.7.

WEATHER RESISTANCE. Under all sorts of weather conditions, PC Glass Block construction has proved its durability. Tests of panels subjected to repeated cycles of heating, water spray and freezing show no sign of cracking or other structural deterioration, although temperatures well above and below those encountered in any exposure have been regularly used.

Experience, both in the laboratory, where some 4000 sq. ft. of panels 8' x 10' in size have been tested, and also in the field where records of a number of jobs are available, conclusively indicates that properly constructed panels of PC Glass Blocks will be free from leakage.



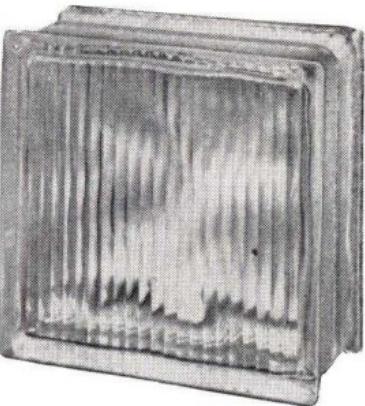
FACE PATTERNS PC GLASS BLOCKS

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH CORNING CORP., PITTSBURGH

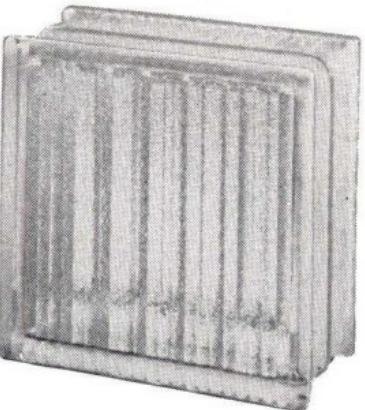
REEDED DECORA

1. A modified Decora design to increase irregular pattern effects.
2. High light transmission with good diffusion and superior obscurity.
3. Should be laid with exterior reeds vertical.
4. Cleanability is maintained by the smoothly rounded exterior reeds.
5. Pattern description: Narrow parallel reeds on both exterior faces, asymmetric design on both interior faces.



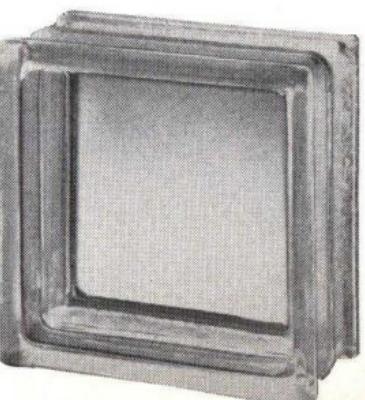
SAXON

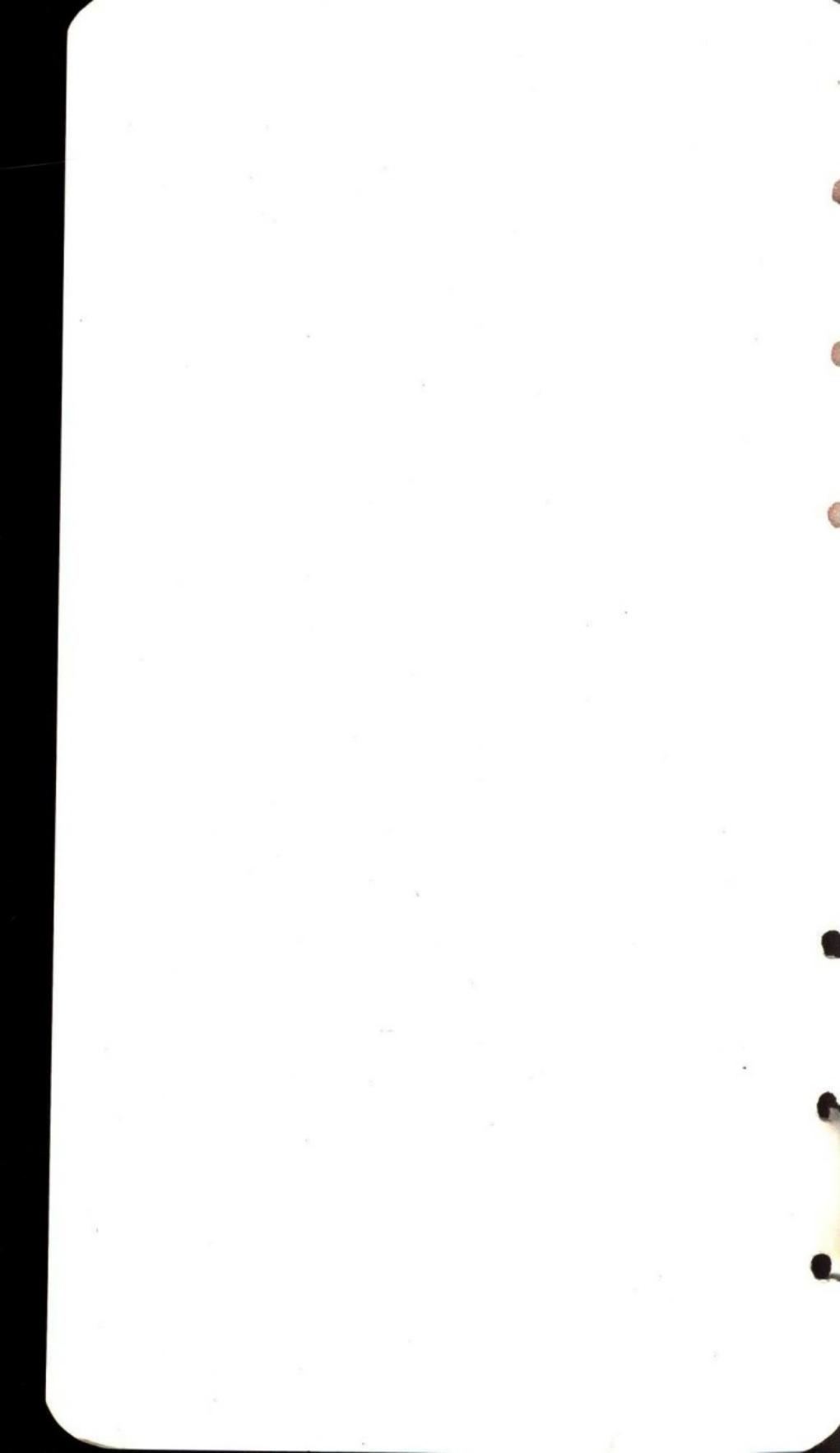
1. A pleasing uniform pattern designed for even light diffusion and brightness reduction, but with good light transmission.
2. Interior etched surfaces with exterior reeds produce maximum obscurity.
3. Should be laid with exterior reeds vertical.
4. Cleanability is maintained by the smoothly rounded exterior reeds.
5. Pattern description: Narrow parallel reeds on both exterior faces, parallel to wide flutes on both interior faces. Both interior faces are etched.



VUE

1. A pattern employing clear glass surfaces to permit sufficient general vision to prevent the "shut-in" feeling.
2. High light transmission.
3. Cleanability is assured by smooth exterior surfaces.
4. Pattern description: Clear, smooth interior and exterior surfaces.





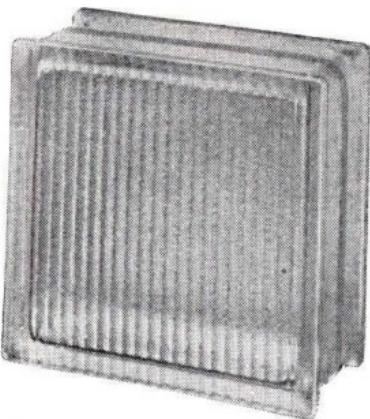
FACE PATTERNS PC GLASS BLOCKS

Pittsburgh DATA SHEET HANDBOOK

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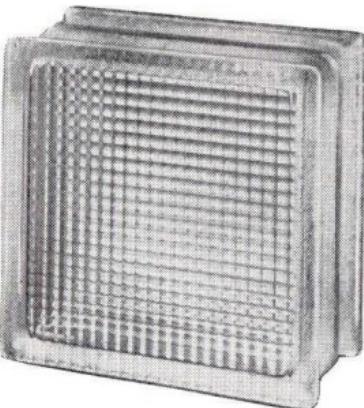
BRISTOL

1. Designed to provide softer, more diffused light.
2. Should be laid with exterior flutes vertical.
3. Cleanability maintained by the smooth exterior flutes and lightly etched border.
4. Pattern description: Narrow vertical flutes and lightly etched border on both outside faces, and flat etched inside faces.



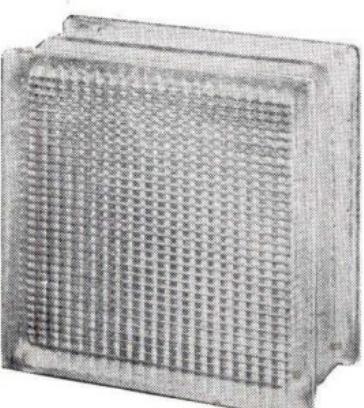
DRUID

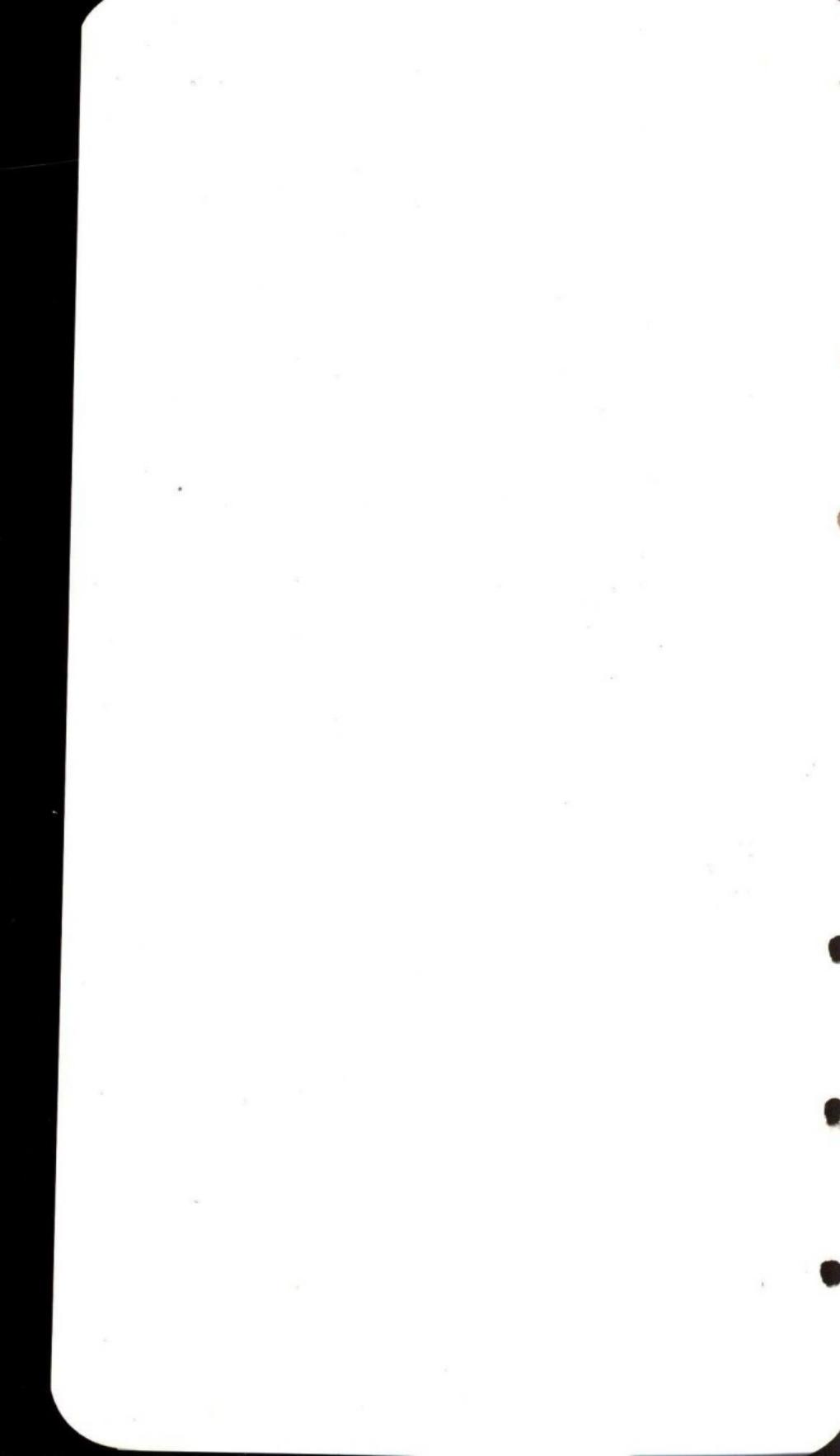
1. Designed to provide high light transmission and closely match the Prism Light-Directing unit. For use on elevations without sun exposure when Prism Light-Directing units are used on adjacent sun exposure elevations.
2. Must be laid with exterior flutes vertical.
3. Cleanability is maintained by the smooth exterior flutes and lightly etched border.
4. Pattern description: Narrow vertical flutes and lightly etched border on both outside faces, horizontal flutes on both inside faces. Closely matches appearance of Prism Light-Directing unit.



ESSEX

1. Specially designed for low light transmission. For use below eye-level in panels containing Prism Light-Directing Blocks and on elevations subjected to severe exposure to direct sunlight where Prism Light-Directing Blocks are not adaptable.
2. Must be laid with exterior flutes horizontal.
3. Pattern description: Horizontal spreading flutes and lightly etched borders on both exterior faces, vertical prisms on both interior faces.





FACE PATTERNS

PC GLASS BLOCKS

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH CORNING CORP., PITTSBURGH

1. Specially designed to control the direction of sunlight transmitted by the block, and under proper conditions, to provide improved natural illumination.
2. By means of unlike prisms on the two inside faces, the greater part of the transmitted light is directed upward — away from the direct vision or glare zone — to the ceiling where it may be reflected downward to provide indirect "daylighting."
3. Can be set in one position only — block is marked to indicate correct setting. Must not be used below eye level. For lower portions of panels below eye level use Essex Blocks.
4. Smooth vertical exterior flutes and lightly etched border insure easy cleaning.
5. Pattern description: Narrow vertical flutes and etched border on both outside faces, horizontal prisms on both inside faces.



PRISM LIGHT-DIRECTING

(Subject to change without notice)

PATTERNS	SIZES AND SHAPES AVAILABLE					
	5¾" Square	7¾" Square	11¾" Square	5¾" Corner	7¾" Corner	7¾" Radial
Argus	●	●	●	●	●	●
Argus Parallel Flutes	●	●	●			
Bristol		●	●		●	●
Decora	●	●	●	●	●	●
Druid		●			●	●
Essex		●			●	●
Prism Light-Direct.		●				
Reeded-Decora	●	●	●	●	●	●
Saxon	●	●	●	●	●	●
Vue		●				●

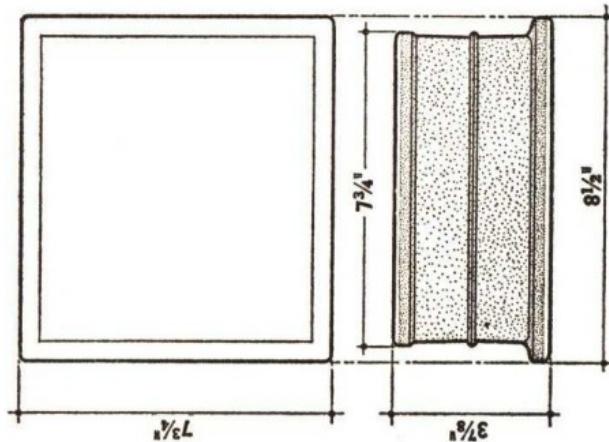


MODULAR* DIMENSIONS PC GLASS BLOCKS

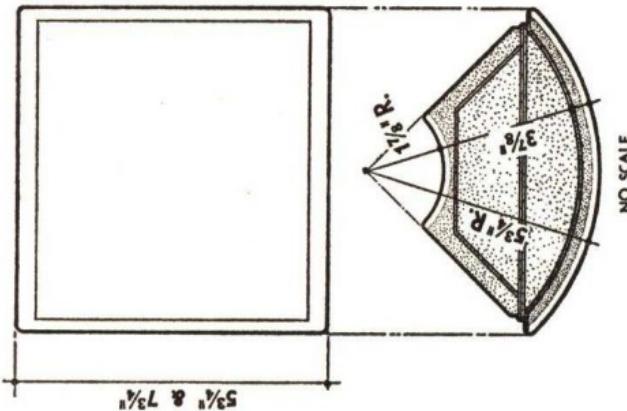
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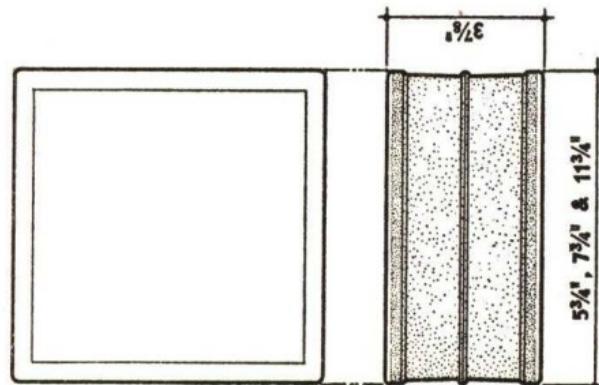
RADIAL BLOCKS



CORNER BLOCKS



SQUARE BLOCKS



*PC Glass Blocks have Standard Coordinated Dimensions, and meet the requirements of American Standards Association Project A62, and conform to the American Standard Basis for Coordination A62.1-1945.

2020

2020-2021 学年第一学期

高二历史必修一

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ACCESSORY MATERIALS FOR INSTALLATION OF PC GLASS BOOKS

GLASS
BLOCKS

Page **7**

Pittsburgh DATA SHEET HANDBOOK

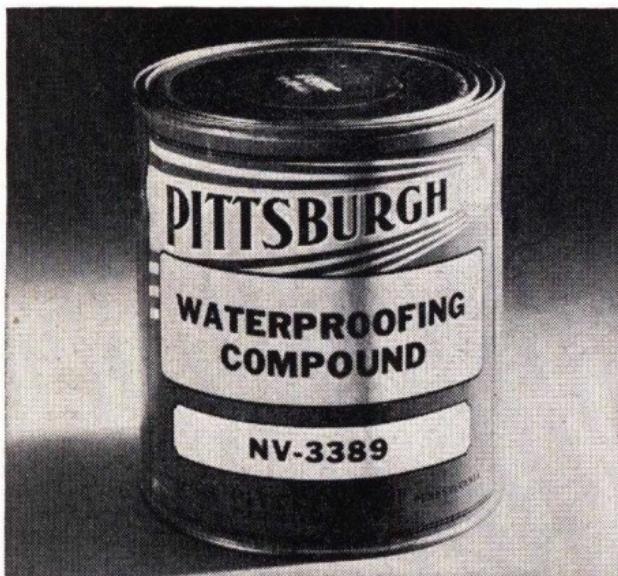
PITTSBURGH CORNING CORP., PITTSBURGH

ACCESSORIES. The accessory materials shown have been especially developed by Pittsburgh Corning Corporation for the proper erection of Glass Block Panels. These accessory materials can be obtained from all suppliers of PC Glass Blocks.



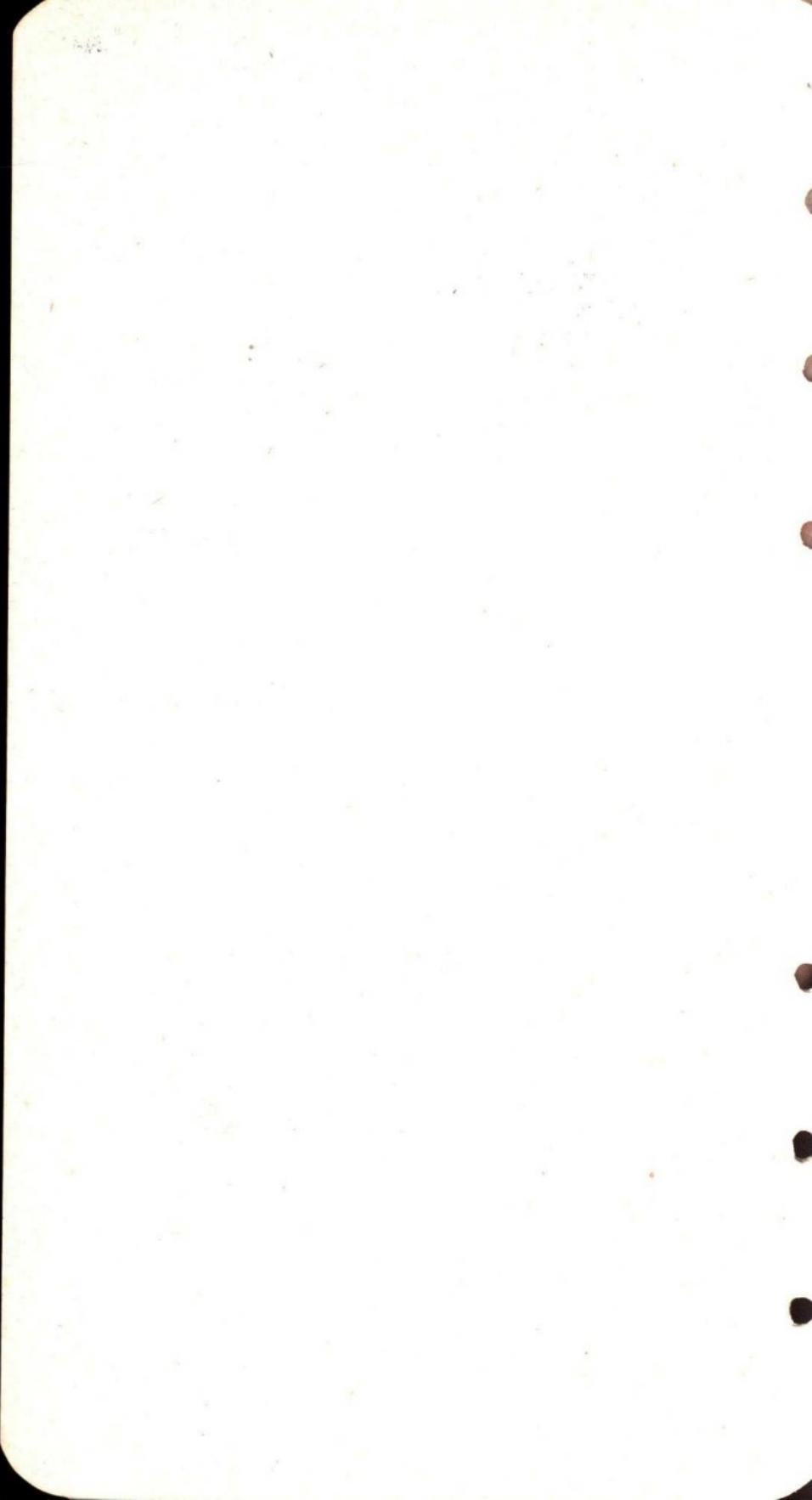
PC ASPHALT EMULSION. To be used on all sills to form a waterproof joint. Also used to adhere expansion strips to side and head jambs before installing Glass Blocks. See specifications for proper application.

Available in one-quart, one-gallon, and five-gallon containers.



PITTSBURGH NV-3389 WATERPROOFING COMPOUND. To be added to the mortar to conform with PC specifications. Use one (1) quart per bag of cement.

Available in one-quart, one-gallon, and five-gallon containers.



ACCESSORY MATERIALS FOR INSTALLATION OF PC GLASS BLOCKS

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH CORNING CORP., PITTSBURGH



PC WALL TIES. To be used in horizontal joints of Glass Block Panels, spaced and installed in accordance with PC specifications. Wall Ties are formed of two No. 9 galvanized wires spaced 2" apart with No. 14 galvanized cross wires welded every 8".

Available in 8' lengths.



PC EXPANSION STRIPS. To be used in expansion spaces at side and head jambs installed in accordance with PC Specifications. Available in the following sizes.

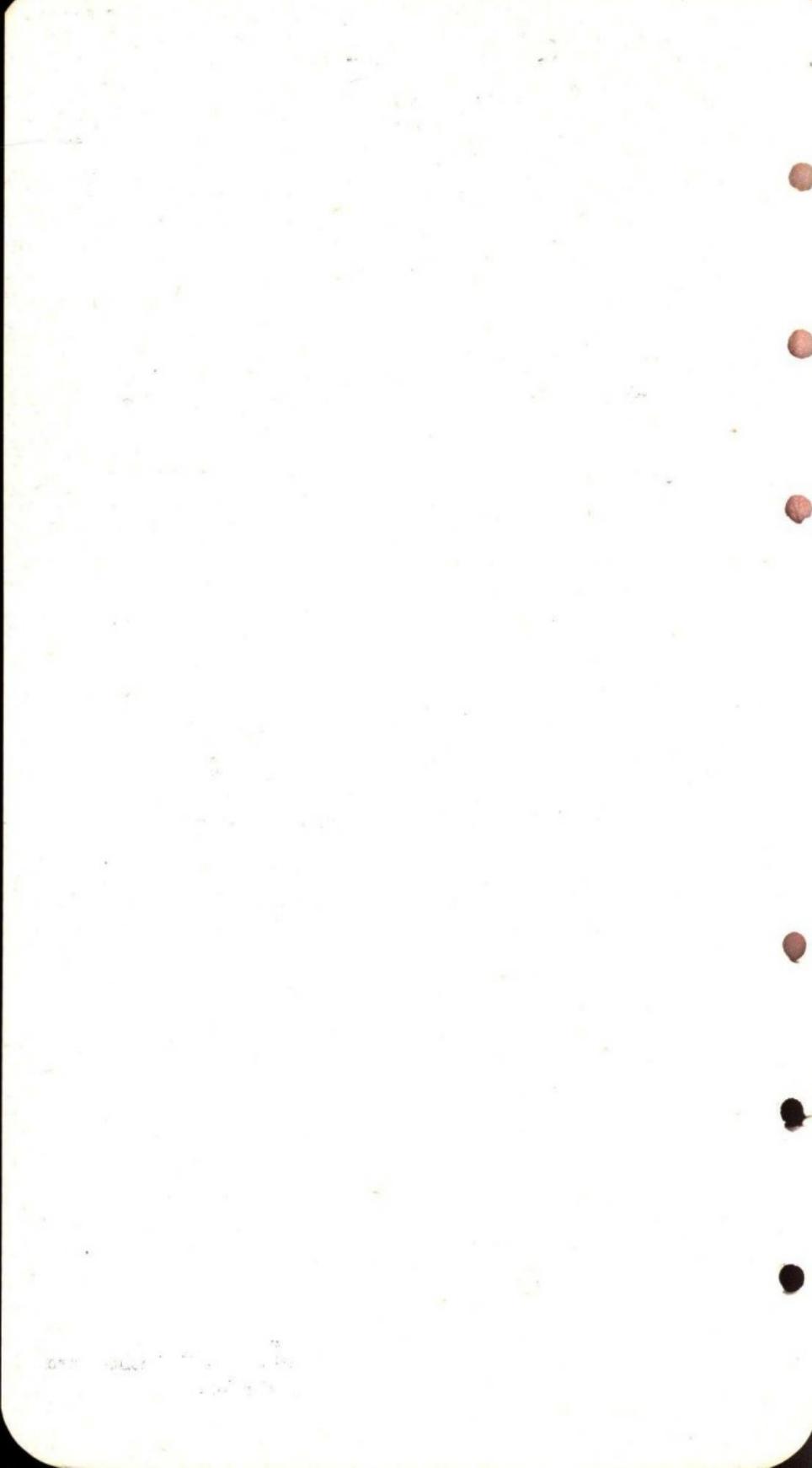
$\frac{9}{16}'' \times 4\frac{1}{8}'' \times 25''$ } $\frac{3}{8}'' \times 4\frac{1}{8}'' \times 25''$ } (For use in chase construction.)

For wall anchor construction, standard $4\frac{1}{8}''$ wide strips can easily be cut to 3" width required.



PC WALL ANCHORS. To be used for supporting panels up to 100 sq. ft. in area where permitted by building code requirements. Spaced and installed in accordance with PC specifications. Wall Anchors are No. 20 gauge perforated steel galvanized after fabrication.

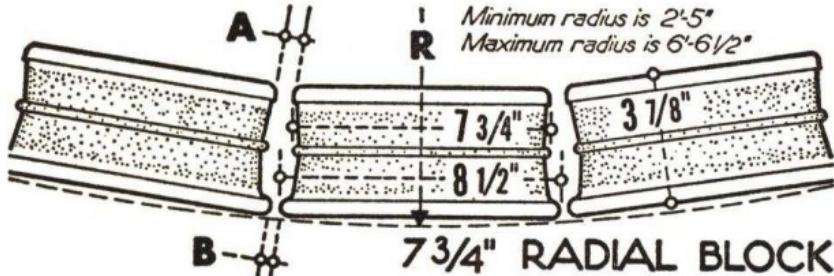
Available in 2'-0" lengths $1\frac{3}{4}''$ wide.



CURVED WALLS OF PC GLASS BLOCKS

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7 3/4" RADIAL BLOCK

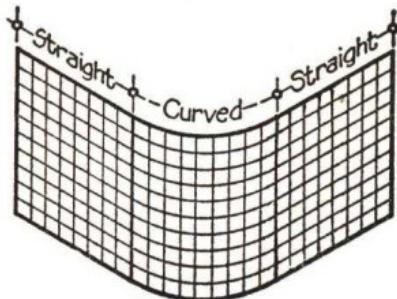
Copyright 1947
Pittsburgh Corning Corp.

R Radius	A (Min.)	B Joint
2'- 5"	1/8"
2'-10"	1/8"
2'-10 3/4"	3/8"
3'- 3"	1/8"
3'- 4 3/4"	1/2"
3'- 8"	1/8"
3'-10 1/2"	5/8"
4'- 1 1/2"	5/8"
4'- 3 3/4"	9/16"
4'- 7"	1/8"
4'- 9 1/4"	1/2"
5'- 0 1/2"	5/16"
5'- 2 1/2"	5/8"
5'- 6"	3/8"
5'- 7 3/4"	5/8"
5'-11 1/2"	3/8"
6'- 1 1/4"	5/8"
6'- 4 3/4"	1/16"
6'- 6 1/2" (Max.)	5/8"	5/16"

Radii given are for 90° arc without fractional blocks.

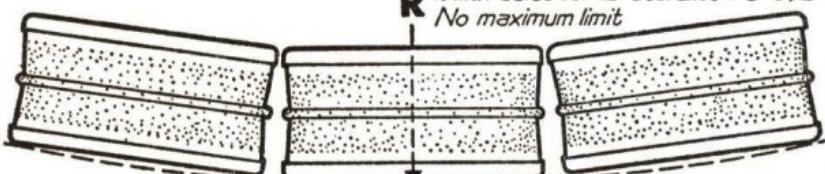
Minimum radius is 2'-5"
Maximum radius is 6'-6 1/2"

7 3/4" RADIAL BLOCK



For panel size limitations with minimum anchorage requirements, see detail sheets. Combinations of flat and curved panels forming integral glass block areas can be installed in manner described for the respective limitations shown on detail sheets. However, it is suggested that curved areas be separated from flat areas by means of intermediate expansion joints and supports as indicated on the small diagram above. For intermediate expansion joints and supports, see detail sheets.

Min.radius for 6"Std. Block-4'-4 1/2"
Min.radius for 8"Std. Block-5'-9"
Min.radius for 12"Std. Block-8'-6 1/2"
No maximum limit



STANDARD BLOCKS

For curved walls, either standard blocks or 7 3/4" radial block may be used. The diagrams show the limits resulting from a minimum vertical joint thickness of 1/8" and a maximum joint thickness of 5/8".

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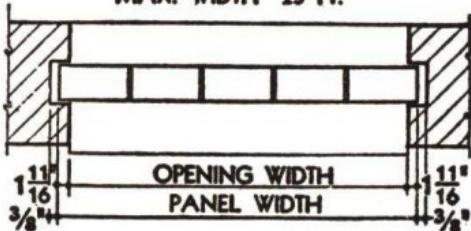
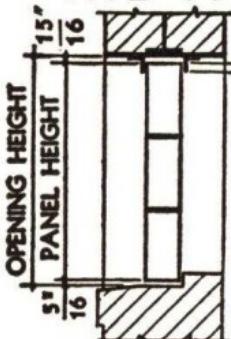
**Layout Diagrams for
PC Glass Block Panels
Based on Modular Coordination**

**GLASS
BLOCKS**
Page **10**

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH CORNING CORP., PITTSBURGH

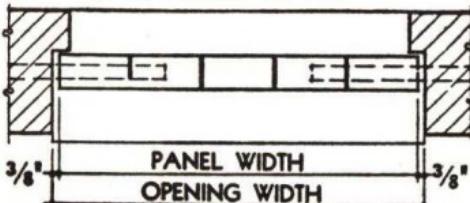
TYPE "A"—CHASE CONSTRUCTION



LIMITATIONS

MAX. AREA 144 SQ. FT.
MAX. HEIGHT 20 FT.
MAX. WIDTH 25 FT.

TYPE "B"—WALL ANCHOR CONSTRUCTION



LIMITATIONS

MAX. AREA 100 SQ. FT.
MAX. HEIGHT 10 FT.
MAX. WIDTH 10 FT.

For 6" Glass Block Layout Table see page 11

For 8" Glass Block Layout Table see page 12

For 12" Glass Block Layout Table see page 13

**Layout Tables for
PC Glass Block Panels
Based on Modular Coordination**

Pittsburgh DATA SHEET HANDBOOK

**5 $\frac{3}{4}$ " SQUARE BLOCKS
 $\frac{1}{4}$ " MORTAR JOINTS**

NO. OF UNITS	PANEL WIDTH OR HEIGHT	TYPE "A"		TYPE "B"	
		MASONRY OPENING WIDTH	MASONRY OPENING HEIGHT	MASONRY OPENING WIDTH	MASONRY OPENING HEIGHT
1	5 $\frac{3}{4}$ "	2 $\frac{3}{8}$ "	7"	6 $\frac{1}{2}$ "	7"
2	11 $\frac{3}{4}$ "	8 $\frac{3}{8}$ "	1'-1"	1'-0 $\frac{1}{2}$ "	1'-1"
3	1'-5 $\frac{3}{4}$ "	1'-2 $\frac{3}{8}$ "	1'-7"	1'-6 $\frac{1}{2}$ "	1'-7"
4	1'-11 $\frac{3}{4}$ "	1'-8 $\frac{3}{8}$ "	2'-1"	2'-0 $\frac{1}{2}$ "	2'-1"
5	2'-5 $\frac{3}{4}$ "	2'-2 $\frac{3}{8}$ "	2'-7"	2'-6 $\frac{1}{2}$ "	2'-7"
6	2'-11 $\frac{3}{4}$ "	2'-8 $\frac{3}{8}$ "	3'-1"	3'-0 $\frac{1}{2}$ "	3'-1"
7	3'-5 $\frac{3}{4}$ "	3'-2 $\frac{3}{8}$ "	3'-7"	3'-6 $\frac{1}{2}$ "	3'-7"
8	3'-11 $\frac{3}{4}$ "	3'-8 $\frac{3}{8}$ "	4'-1"	4'-0 $\frac{1}{2}$ "	4'-1"
9	4'-5 $\frac{3}{4}$ "	4'-2 $\frac{3}{8}$ "	4'-7"	4'-6 $\frac{1}{2}$ "	4'-7"
10	4'-11 $\frac{3}{4}$ "	4'-8 $\frac{3}{8}$ "	5'-1"	5'-0 $\frac{1}{2}$ "	5'-1"
11	5'-5 $\frac{3}{4}$ "	5'-2 $\frac{3}{8}$ "	5'-7"	5'-6 $\frac{1}{2}$ "	5'-7"
12	5'-11 $\frac{3}{4}$ "	5'-8 $\frac{3}{8}$ "	6'-1"	6'-0 $\frac{1}{2}$ "	6'-1"
13	6'-5 $\frac{3}{4}$ "	6'-2 $\frac{3}{8}$ "	6'-7"	6'-6 $\frac{1}{2}$ "	6'-7"
14	6'-11 $\frac{3}{4}$ "	6'-8 $\frac{3}{8}$ "	7'-1"	7'-0 $\frac{1}{2}$ "	7'-1"
15	7'-5 $\frac{3}{4}$ "	7'-2 $\frac{3}{8}$ "	7'-7"	7'-6 $\frac{1}{2}$ "	7'-7"
16	7'-11 $\frac{3}{4}$ "	7'-8 $\frac{3}{8}$ "	8'-1"	8'-0 $\frac{1}{2}$ "	8'-1"
17	8'-5 $\frac{3}{4}$ "	8'-2 $\frac{3}{8}$ "	8'-7"	8'-6 $\frac{1}{2}$ "	8'-7"
18	8'-11 $\frac{3}{4}$ "	8'-8 $\frac{3}{8}$ "	9'-1"	9'-0 $\frac{1}{2}$ "	9'-1"
19	9'-5 $\frac{3}{4}$ "	9'-2 $\frac{3}{8}$ "	9'-7"	9'-6 $\frac{1}{2}$ "	9'-7"
20	9'-11 $\frac{3}{4}$ "	9'-8 $\frac{3}{8}$ "	10'-1"	10'-0 $\frac{1}{2}$ "	10'-1"
21	10'-5 $\frac{3}{4}$ "	10'-2 $\frac{3}{8}$ "	10'-7"		
22	10'-11 $\frac{3}{4}$ "	10'-8 $\frac{3}{8}$ "	11'-1"		
23	11'-5 $\frac{3}{4}$ "	11'-2 $\frac{3}{8}$ "	11'-7"		
24	11'-11 $\frac{3}{4}$ "	11'-8 $\frac{3}{8}$ "	12'-1"		
25	12'-5 $\frac{3}{4}$ "	12'-2 $\frac{3}{8}$ "	12'-7"		
26	12'-11 $\frac{3}{4}$ "	12'-8 $\frac{3}{8}$ "	13'-1"		
27	13'-5 $\frac{3}{4}$ "	13'-2 $\frac{3}{8}$ "	13'-7"		
28	13'-11 $\frac{3}{4}$ "	13'-8 $\frac{3}{8}$ "	14'-1"		
29	14'-5 $\frac{3}{4}$ "	14'-2 $\frac{3}{8}$ "	14'-7"		
30	14'-11 $\frac{3}{4}$ "	14'-8 $\frac{3}{8}$ "	15'-1"		

To Extend Table for Any Column

Example: Find Panel Width for 35 units?

Panel Width for 30 units (from table) = 14' 11 $\frac{3}{4}$ "
Plus Panel Width for 5 units (from table) = 2' 5 $\frac{3}{4}$ "

$17' 5\frac{3}{4}"$

Then add $\frac{1}{4}" = 17' 5\frac{3}{4}"$ for 35 units.

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**Layout Tables for
PC Glass Block Panels
Based on Modular Coordination**

**GLASS
BLOCKS**
Page 12

Pittsburgh DATA SHEET HANDBOOK

**7 $\frac{3}{4}$ " SQUARE BLOCKS
1 $\frac{1}{4}$ " MORTAR JOINTS**

NO. OF UNITS	PANEL WIDTH OR HEIGHT	TYPE "A"		TYPE "B"	
		MASONRY OPENING WIDTH	MASONRY OPENING HEIGHT	MASONRY OPENING WIDTH	MASONRY OPENING HEIGHT
1	7 $\frac{3}{4}$ "	4 $\frac{3}{8}$ "	9"	8 $\frac{1}{2}$ "	9"
2	1'-3 $\frac{3}{4}$ "	1'-0 $\frac{3}{8}$ "	1'-5"	1'-4 $\frac{1}{2}$ "	1'-5"
3	1'-11 $\frac{3}{4}$ "	1'-8 $\frac{3}{8}$ "	2'-1"	2'-0 $\frac{1}{2}$ "	2'-1"
4	2'-7 $\frac{3}{4}$ "	2'-4 $\frac{3}{8}$ "	2'-9"	2'-8 $\frac{1}{2}$ "	2'-9"
5	3'-3 $\frac{3}{4}$ "	3'-0 $\frac{3}{8}$ "	3'-5"	3'-4 $\frac{1}{2}$ "	3'-5"
6	3'-11 $\frac{3}{4}$ "	3'-8 $\frac{3}{8}$ "	4'-1"	4'-0 $\frac{1}{2}$ "	4'-1"
7	4'-7 $\frac{3}{4}$ "	4'-4 $\frac{3}{8}$ "	4'-9"	4'-8 $\frac{1}{2}$ "	4'-9"
8	5'-3 $\frac{3}{4}$ "	5'-0 $\frac{3}{8}$ "	5'-5"	5'-4 $\frac{1}{2}$ "	5'-5"
9	5'-11 $\frac{3}{4}$ "	5'-8 $\frac{3}{8}$ "	6'-1"	6'-0 $\frac{1}{2}$ "	6'-1"
10	6'-7 $\frac{3}{4}$ "	6'-4 $\frac{3}{8}$ "	6'-9"	6'-8 $\frac{1}{2}$ "	6'-9"
11	7'-3 $\frac{3}{4}$ "	7'-0 $\frac{3}{8}$ "	7'-5"	7'-4 $\frac{1}{2}$ "	7'-5"
12	7'-11 $\frac{3}{4}$ "	7'-8 $\frac{3}{8}$ "	8'-1"	8'-0 $\frac{1}{2}$ "	8'-1"
13	8'-7 $\frac{3}{4}$ "	8'-4 $\frac{3}{8}$ "	8'-9"	8'-8 $\frac{1}{2}$ "	8'-9"
14	9'-3 $\frac{3}{4}$ "	9'-0 $\frac{3}{8}$ "	9'-5"	9'-4 $\frac{1}{2}$ "	9'-5"
15	9'-11 $\frac{3}{4}$ "	9'-8 $\frac{3}{8}$ "	10'-1"	10'-0 $\frac{1}{2}$ "	10'-1"
16	10'-7 $\frac{3}{4}$ "	10'-4 $\frac{3}{8}$ "	10'-9"		
17	11'-3 $\frac{3}{4}$ "	11'-0 $\frac{3}{8}$ "	11'-5"		
18	11'-11 $\frac{3}{4}$ "	11'-8 $\frac{3}{8}$ "	12'-1"		
19	12'-7 $\frac{3}{4}$ "	12'-4 $\frac{3}{8}$ "	12'-9"		
20	13'-3 $\frac{3}{4}$ "	13'-0 $\frac{3}{8}$ "	13'-5"		
21	13'-11 $\frac{3}{4}$ "	13'-8 $\frac{3}{8}$ "	14'-1"		
22	14'-7 $\frac{3}{4}$ "	14'-4 $\frac{3}{8}$ "	14'-9"		
23	15'-3 $\frac{3}{4}$ "	15'-0 $\frac{3}{8}$ "	15'-5"		
24	15'-11 $\frac{3}{4}$ "	15'-8 $\frac{3}{8}$ "	16'-1"		
25	16'-7 $\frac{3}{4}$ "	16'-4 $\frac{3}{8}$ "	16'-9"		
26	17'-3 $\frac{3}{4}$ "	17'-0 $\frac{3}{8}$ "	17'-5"		
27	17'-11 $\frac{3}{4}$ "	17'-8 $\frac{3}{8}$ "	18'-1"		
28	18'-7 $\frac{3}{4}$ "	18'-4 $\frac{3}{8}$ "	18'-9"		
29	19'-3 $\frac{3}{4}$ "	19'-0 $\frac{3}{8}$ "	19'-5"		
30	19'-11 $\frac{3}{4}$ "	19'-8 $\frac{3}{8}$ "	20'-1"		

To Extend Table for Any Column
Example: Find Panel Width for 38 units?

Panel Width for 30 units (from tables) = 19' 11 $\frac{3}{4}$ "
Plus Panel Width for 8 units (from tables) = 5' 3 $\frac{3}{4}$ "

25' 3 $\frac{3}{4}$ "

Then add $\frac{1}{4}$ " = 25' 3 $\frac{3}{4}$ " for 38 units



**Layout Tables for
PC Glass Block Panels
Based on Modular Coordination**

Pittsburgh DATA SHEET HANDBOOK
PITTSBURGH CORNING CORP., PITTSBURGH

**11 $\frac{3}{4}$ " SQUARE BLOCKS
 $\frac{1}{4}$ " MORTAR JOINTS**

NO. OF UNITS	PANEL WIDTH OR HEIGHT	TYPE "A"		TYPE "B"	
		MASONRY OPENING WIDTH	MASONRY OPENING HEIGHT	MASONRY OPENING WIDTH	MASONRY OPENING HEIGHT
1	11 $\frac{3}{4}$ "	8 $\frac{3}{8}$ "	1'-1"	1'-0 $\frac{1}{2}$ "	1'-1"
2	1'-11 $\frac{3}{4}$ "	1'-8 $\frac{3}{8}$ "	2'-1"	2'-0 $\frac{1}{2}$ "	2'-1"
3	2'-11 $\frac{3}{4}$ "	2'-8 $\frac{3}{8}$ "	3'-1"	3'-0 $\frac{1}{2}$ "	3'-1"
4	3'-11 $\frac{3}{4}$ "	3'-8 $\frac{3}{8}$ "	4'-1"	4'-0 $\frac{1}{2}$ "	4'-1"
5	4'-11 $\frac{3}{4}$ "	4'-8 $\frac{3}{8}$ "	5'-1"	5'-0 $\frac{1}{2}$ "	5'-1"
6	5'-11 $\frac{3}{4}$ "	5'-8 $\frac{3}{8}$ "	6'-1"	6'-0 $\frac{1}{2}$ "	6'-1"
7	6'-11 $\frac{3}{4}$ "	6'-8 $\frac{3}{8}$ "	7'-1"	7'-0 $\frac{1}{2}$ "	7'-1"
8	7'-11 $\frac{3}{4}$ "	7'-8 $\frac{3}{8}$ "	8'-1"	8'-0 $\frac{1}{2}$ "	8'-1"
9	8'-11 $\frac{3}{4}$ "	8'-8 $\frac{3}{8}$ "	9'-1"	9'-0 $\frac{1}{2}$ "	9'-1"
10	9'-11 $\frac{3}{4}$ "	9'-8 $\frac{3}{8}$ "	10'-1"	10'-0 $\frac{1}{2}$ "	10'-1"
11	10'-11 $\frac{3}{4}$ "	10'-8 $\frac{3}{8}$ "	11'-1"		
12	11'-11 $\frac{3}{4}$ "	11'-8 $\frac{3}{8}$ "	12'-1"		
13	12'-11 $\frac{3}{4}$ "	12'-8 $\frac{3}{8}$ "	13'-1"		
14	13'-11 $\frac{3}{4}$ "	13'-8 $\frac{3}{8}$ "	14'-1"		
15	14'-11 $\frac{3}{4}$ "	14'-8 $\frac{3}{8}$ "	15'-1"		
16	15'-11 $\frac{3}{4}$ "	15'-8 $\frac{3}{8}$ "	16'-1"		
17	16'-11 $\frac{3}{4}$ "	16'-8 $\frac{3}{8}$ "	17'-1"		
18	17'-11 $\frac{3}{4}$ "	17'-8 $\frac{3}{8}$ "	18'-1"		
19	18'-11 $\frac{3}{4}$ "	18'-8 $\frac{3}{8}$ "	19'-1"		
20	19'-11 $\frac{3}{4}$ "	19'-8 $\frac{3}{8}$ "	20'-1"		
21	20'-11 $\frac{3}{4}$ "	20'-8 $\frac{3}{8}$ "			
22	21'-11 $\frac{3}{4}$ "	21'-8 $\frac{3}{8}$ "			
23	22'-11 $\frac{3}{4}$ "	22'-8 $\frac{3}{8}$ "			
24	23'-11 $\frac{3}{4}$ "	23'-8 $\frac{3}{8}$ "			
25	24'-11 $\frac{3}{4}$ "	24'-8 $\frac{3}{8}$ "			

**MODULAR
COORDINATION**

The American Standard Basis for the Coordination of Dimensions of Building Materials and Equipment A62.1-1945 established a standard grid based on a Module of 4". Most producers of masonry products, glass blocks, windows and other building materials have adopted Modular Coordinated Sizes. Modular Installation Details on the following pages show combinations of these materials incorporating basic principles for installing glass blocks. For additional details refer to the "A62 Guide for Modular Coordination" published by Modular Service Association, 110 Arlington Street, Boston 16, Massachusetts.



Modular Installation Details for Large Simple and Large Continuous Block Panels

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH CORNING CORP., PITTSBURGH

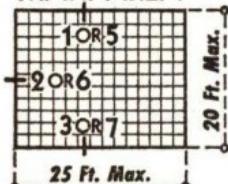
Exterior Panel Size Limitations with minimum expansion and anchorage requirements

GENERAL. Construction supporting panels over 144 square feet in area must be of a type which will provide for a minimum of movement and settlement.

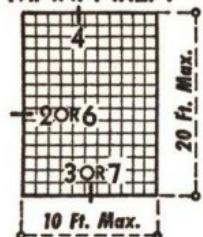
Structural members shown are to indicate principles of construction. Sizes must be calculated for loads applied. Information shown on these sheets is not intended to conflict with any local building code requirements.

LARGE SIMPLE PANELS

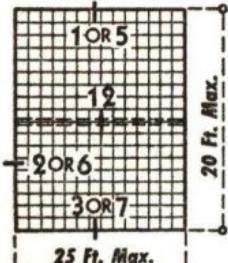
144 SQ. FT.
MAX. AREA



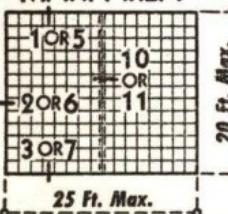
144 SQ. FT.
MAX. AREA



250 SQ. FT.
MAX. AREA

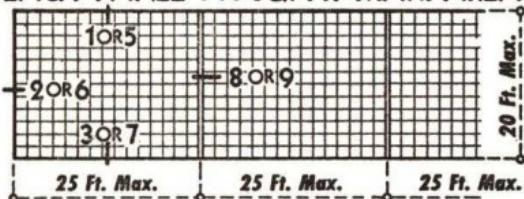


250 SQ. FT.
MAX. AREA

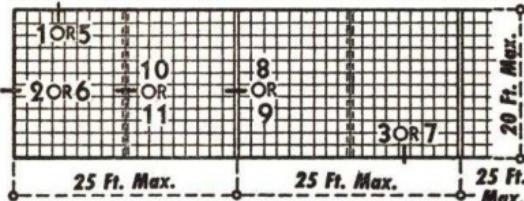


LARGE CONTINUOUS PANELS

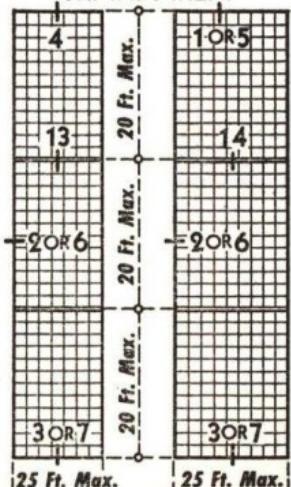
EACH PANEL 144 SQ. FT. MAX. AREA



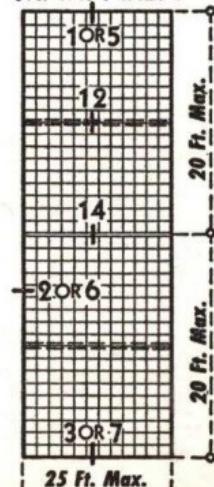
EACH PANEL 250 SQ. FT. MAX. AREA

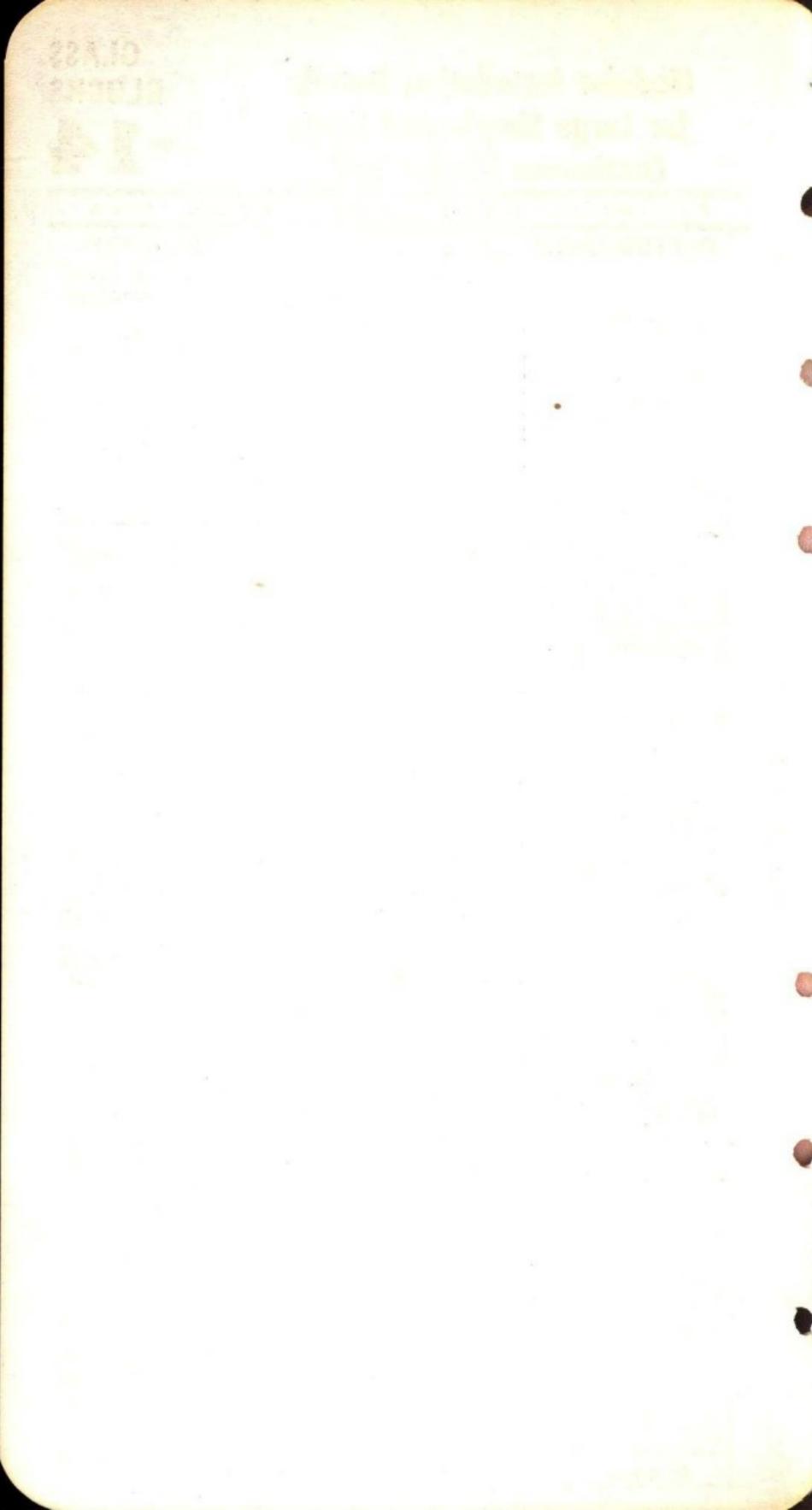


EACH PANEL
144 SQ. FT.
MAX. AREA



EACH PANEL
250 SQ. FT.
MAX. AREA

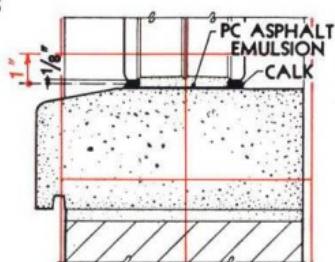
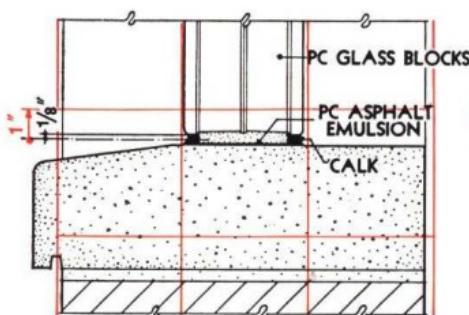
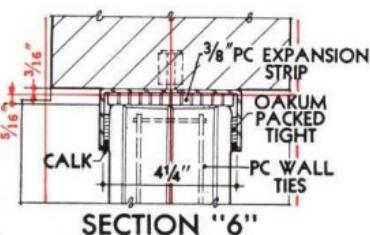
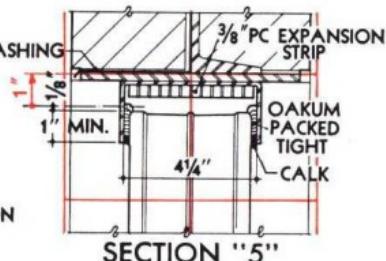
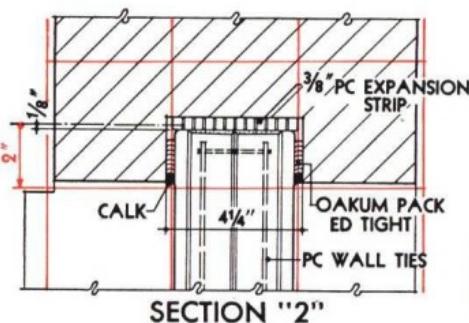
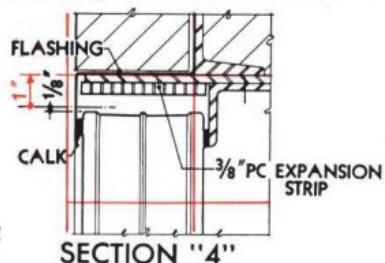
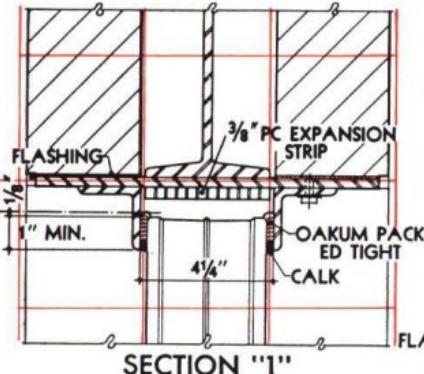




Modular Installation Details for Large Simple and Large Continuous Block Panels

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH CORNING CORP., PITTSBURGH



SCALE 1 1/2" = 1'-0"

GENERAL NOTES

All red lines shown are Grid Lines. When Section "6" is used vertical mortar joints of panels must be compressed slightly to obtain sufficient space at jambs for expansion strips.

GRID POSITION. Installation details for glass block panels establish the grid position of individual units vertically and horizontally. The vertical joints may be either on grid lines or centered between grid lines, depending upon the details used at the panel jambs. The center lines of horizontal joints may either be on grid lines or some small dimension, normally 1", below or above grid lines. Glass block panels are normally positioned with the nominal faces on grid lines, so as to fit with chases or recesses in masonry openings. Other grid positions for the exposed faces may be used where required, examples of which are shown. Those details which do not indicate panel position with reference to grid lines, can be used for several conditions.

1000

Modular Installation Details for Large Simple and Large Continuous Block Panels

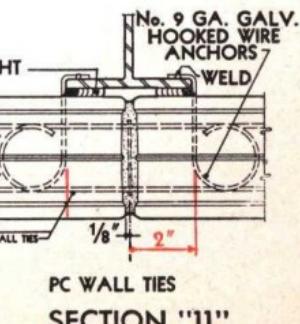
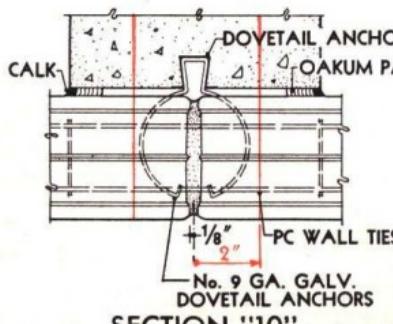
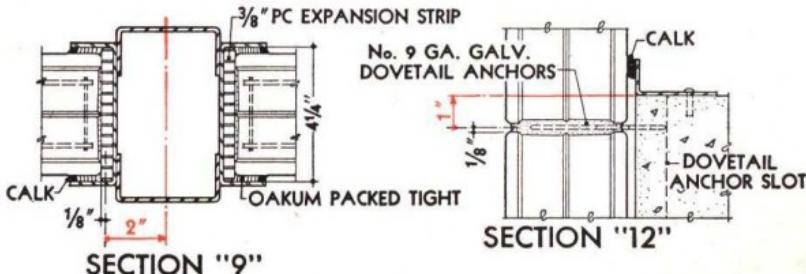
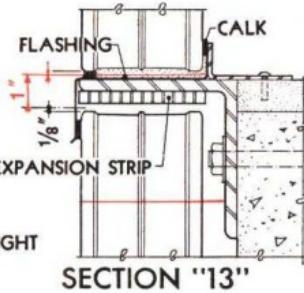
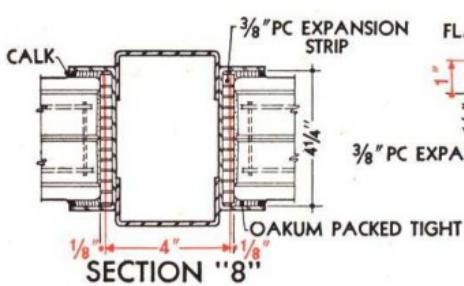
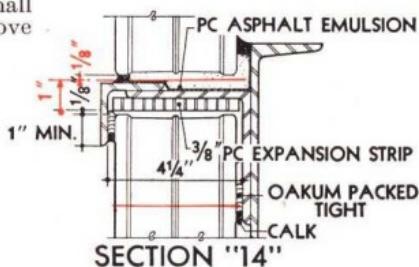
Pittsburgh DATA SHEET HANDBOOK

GENERAL NOTES

All red lines shown are Grid Lines.

GRID POSITION. Installation details for glass block panels establish the grid position of individual units vertical and horizontally. The vertical joints may be either on grid lines or centered between grid lines, depending upon the details used at the panel jambs. The center lines of horizontal joints may either be on grid lines or some small dimension, normally 1", below or above grid lines. Glass block panels are normally positioned with the nominal faces on grid lines, so as to fit with chases or recesses in masonry openings. Other grid positions for the exposed faces may be used where required, examples of which are shown. Those details which do not indicate panel position with reference to grid lines, can be used for several conditions.

SCALE $1\frac{1}{2}'' = 1'-0''$





Modular Installation Details for Small Simple and Small Continuous Block Panels

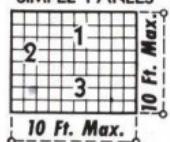
GLASS
BLOCKS
Page **17**

Pittsburgh DATA SHEET HANDBOOK

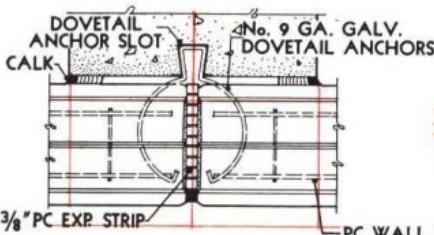
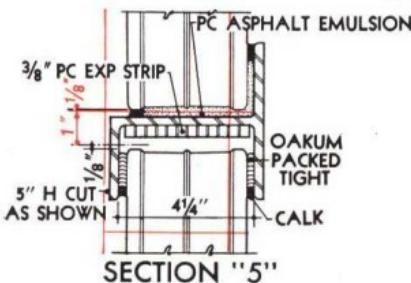
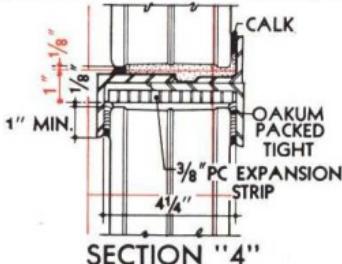
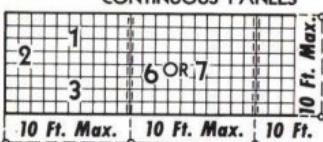
SMALL EXTERIOR PANELS 100 SQ. FT. MAX. AREA

Wall anchors providing lateral support for glass block panels are restricted only by building code requirements and the discretion of the architect. Where wall anchors are forbidden, chase construction shall be used.

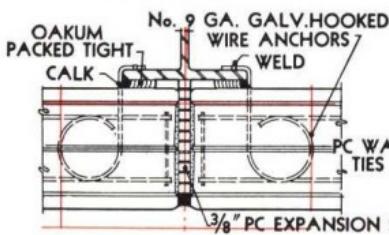
SIMPLE PANELS



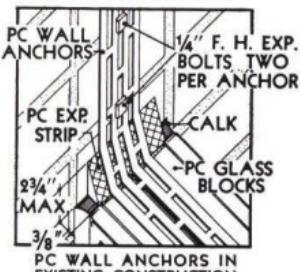
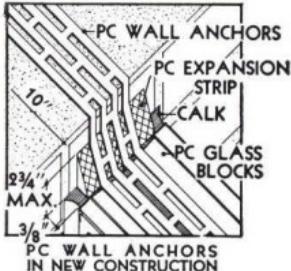
CONTINUOUS PANELS



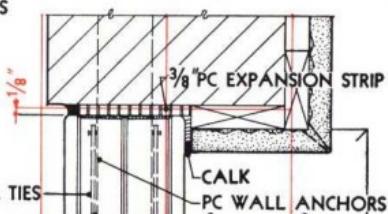
SECTION "6"



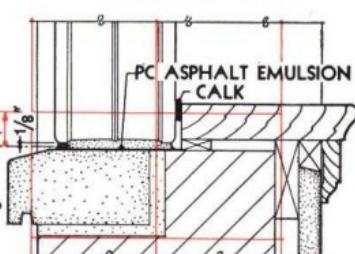
SECTION "7"



SECTION "1"



SECTION "2"



SECTION "3"

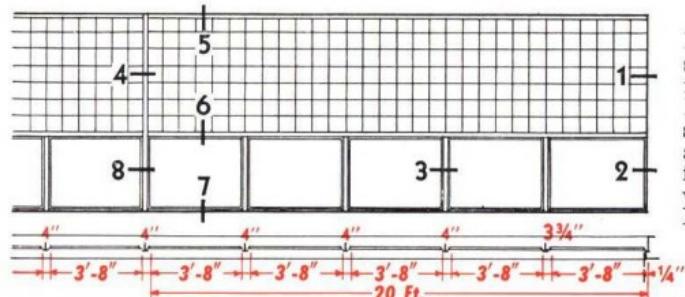
SCALE $1\frac{1}{2}'' = 1'-0''$



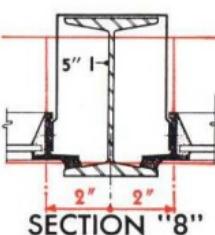
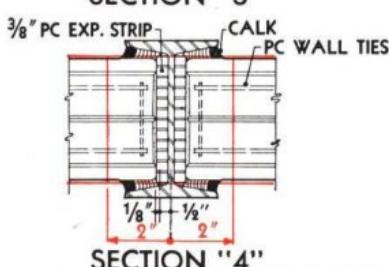
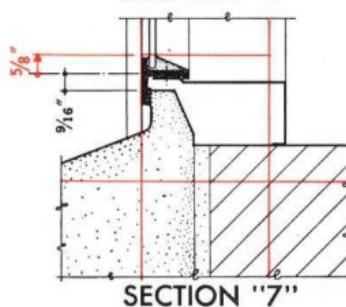
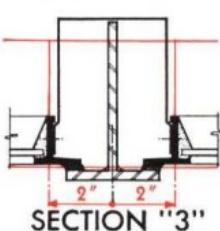
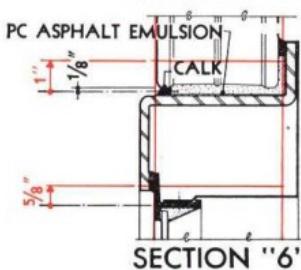
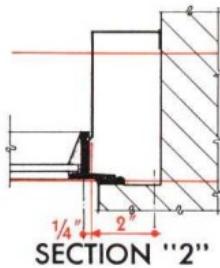
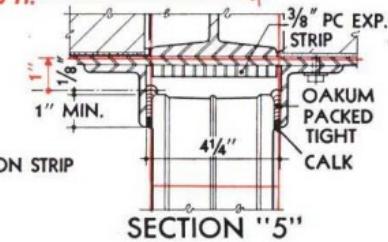
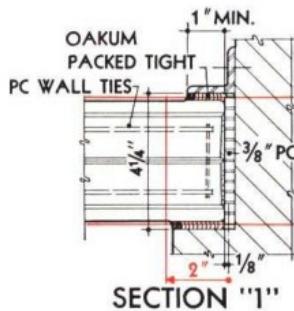
Modular Installation Details for Continuous Sash and Block Combination Panels

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH CORNING CORP., PITTSBURGH



Many metal sash manufacturers offer Modular standard sash and frames for combining with Glass Block.



SCALE 1 1/2" = 1'-0"

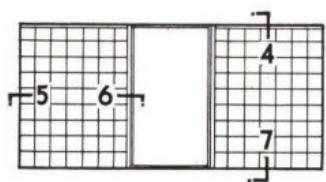
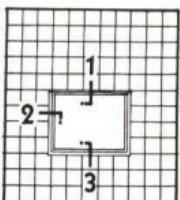


Modular Installation Details

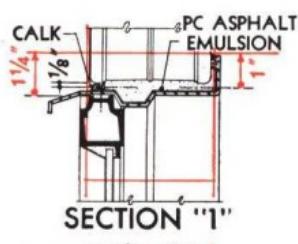
Single Sash and Block Combination Panels

GLASS
BLOCKS
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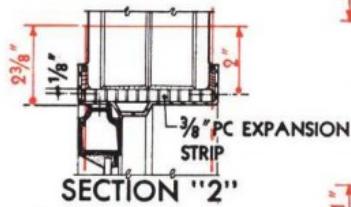
Pittsburgh DATA SHEET HANDBOOK
PITTSBURGH CORNING CORP., PITTSBURGH



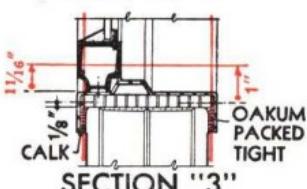
Many metal sash manufacturers offer Modular standard sash and frames for combining with Glass Block.



SECTION 1

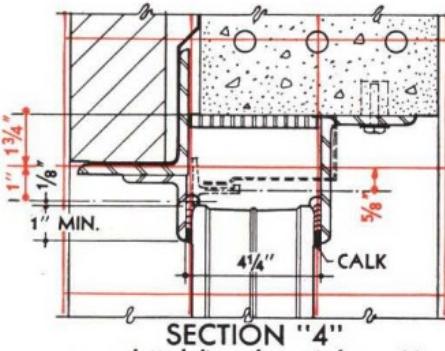


SECTION 2



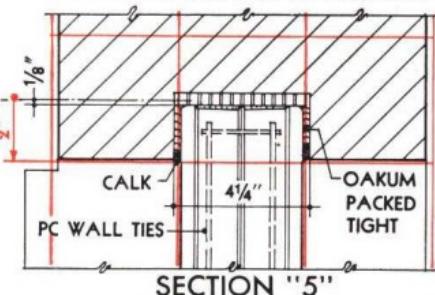
SECTION 3

SCALE $1\frac{1}{2}'' = 1'-0''$

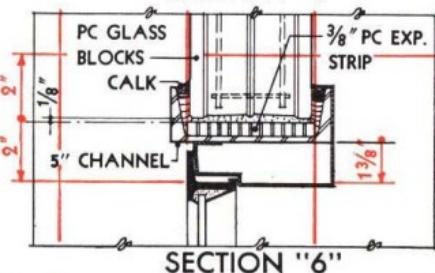


SECTION 4

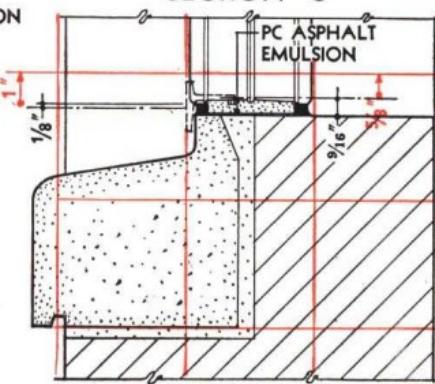
..... dotted lines show window position



SECTION 5



SECTION 6



SECTION 7

..... dotted lines
show window position



Modular Installation Details

Interior Block Panels

Page

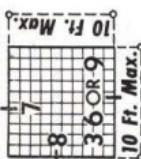
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Pittsburgh DATA SHEET HANDBOOK

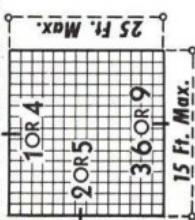
PITTSBURGH CORNING CORP., PITTSBURGH

Copyright 1947
Pittsburgh Corning Corp.

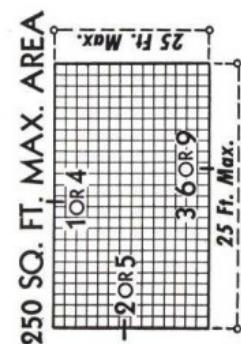
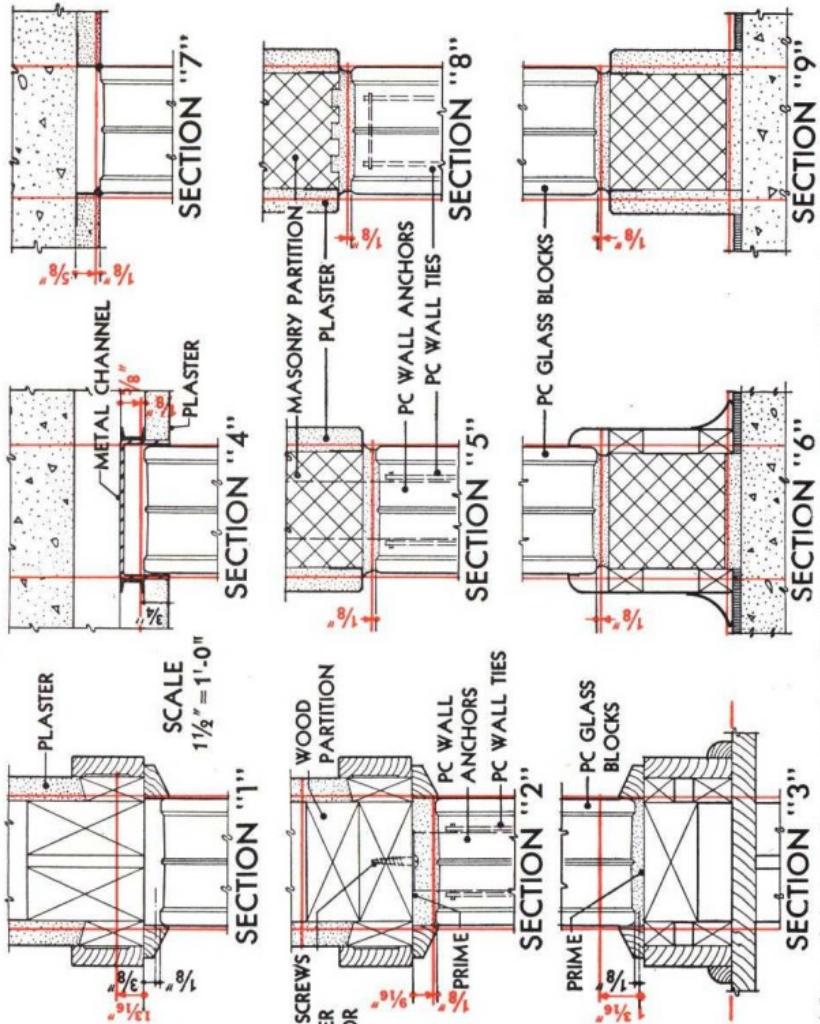
100 SQ. FT. MAX. AREA



144 SQ. FT. MAX. AREA



250 SQ. FT. MAX. AREA

INTERIOR PANEL SIZE LIMITATIONS
WITH MINIMUM EXPANSION &
ANCHORAGE REQUIREMENTS

Provide construction with a minimum of movement and settlement for panels over 144 sq. ft. in area.

3972. 31

100

100

100

100

100

100

100

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100

PC GLASS BLOCKS

GLASS
BLOCKS

Listed by
Underwriters' Laboratories, Inc.

Page

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Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH CORNING CORP., PITTSBURGH

PC GLASS BLOCKS LISTED BY
UNDERWRITERS' LABORATORIES, INC.

(See Reproduction of Guide Card below)

NOTE: For information regarding details of chase construction required, consult the Pittsburgh Corning Corporation, 632 Duquesne Way, Pittsburgh, Pa., or your nearest branch of the Pittsburgh Plate Glass Company.

Guide No. 40 UM2.6.5. December 11, 1945 File R2556.

**Pittsburgh Corning Corp., Mfr.,
632 Duquesne Way, Pittsburgh 22, Pa.**

Glass Blocks.

For window openings not exceeding 120 sq ft in area, nor 12 ft in width or height, subject to light fire exposure (Class F openings). Argus, Argus Parallel, Bristol, Druid, Decora, Essex, and Saxon PC hollow glass blocks, nominally 7-3/4 by 7-3/4 by 3-7/8 in., and Argus, Argus Parallel, Decora, and Saxon 5-3/4 by 5-3/4-in. face dimensions, 3-7/8 in. thick; laid with 1/4-in. horizontal and vertical mortar joints; mortar consisting of one part portland cement, one part hydrated lime, and four parts No. 1 screened torpedo sand by volume; each horizontal joint except between the two top rows reinforced for full length with No. 9 and 14 Bwg galvanized wire mesh; the glass block panels extending 1-1/4 in. into grooves 2-1/4 in. deep in jambs and lintel of the masonry openings, with glass or mineral wool in the remaining spaces in the grooves, to provide for expansion of the glass panels; exterior jamb and lintel edges caulked with waterproofing mastic. Marking: Letters "PC", pattern designation, size and manufacturer's name on container.

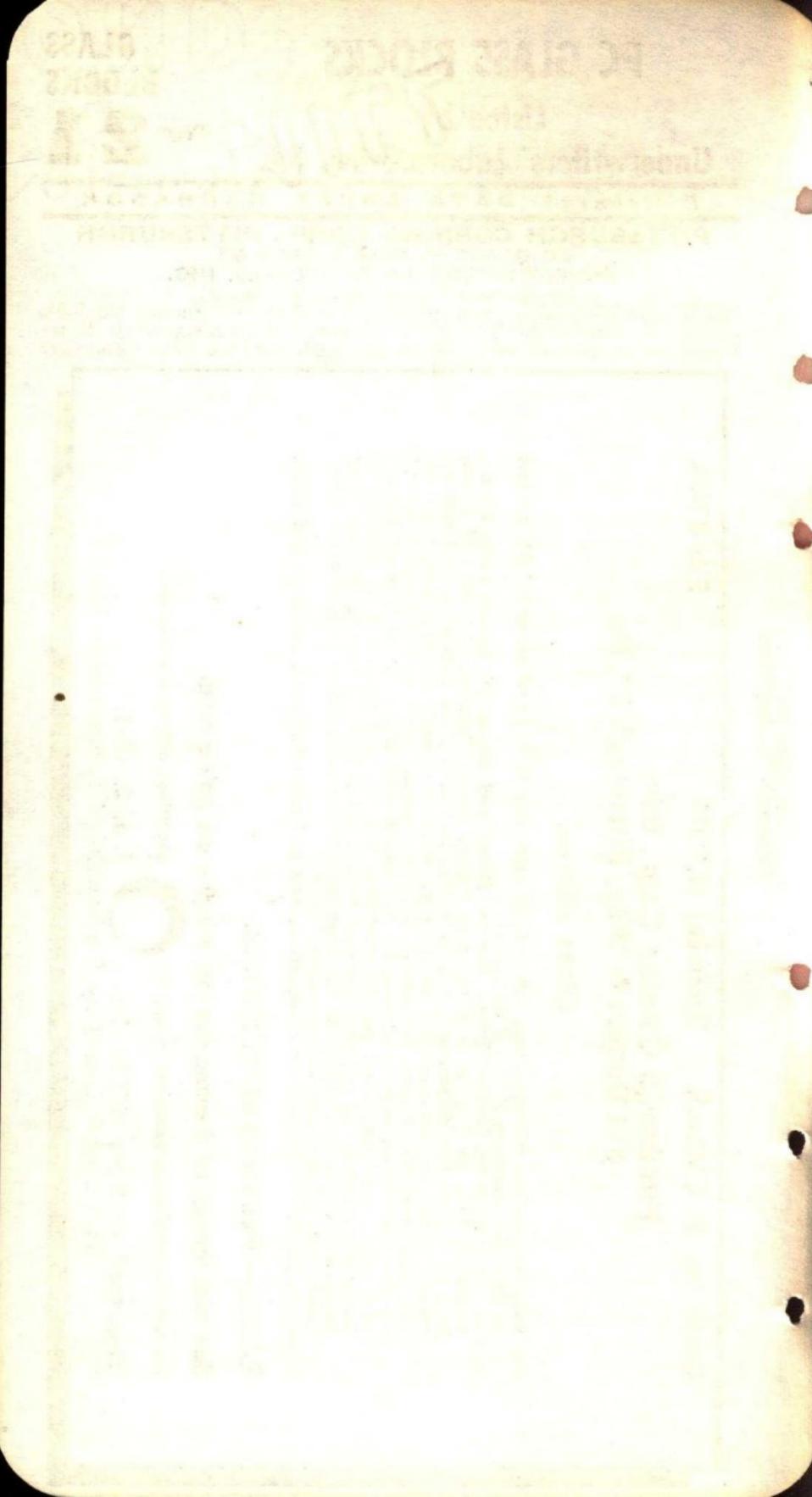
Listed—Reexamination Service.

See description of Reexamination Service on guide card.

Authorities having jurisdiction should be  consulted before installation.

This card replaces R2556 dated  Jan. 2, 1941.

This card is issued by Underwriters' Laboratories, Inc.



**CLOSED SPECIFICATIONS
PC GLASS BLOCKS**Page **22****Pittsburgh DATA SHEET HANDBOOK****PITTSBURGH CORNING CORP., PITTSBURGH**

GENERAL CONDITIONS. The "General Conditions" of the contract are a part of these specifications.

SCOPE OF THE WORK. This contractor shall furnish all labor and materials to install all glass blocks where shown on the drawings or specified hereunder. This shall include the furnishing and installation of all expansion joint strips, oakum packing, wall ties, wall anchors, caulking, asphalt emulsion, and other labor and materials necessary for a complete installation. This contract does not include the preparation of the structure to receive the glass block panels, such as chases, stiffeners, etc., except as hereinafter specified.

MATERIALS: GLASS BLOCKS . . . shall be hollow, partially evacuated, clear, colorless glass units as manufactured by the Pittsburgh Corning Corporation. Units shall be "all glass," formed of two halves fused together at a high temperature. Edges shall be so formed as to provide a "Key-lock" Mortar Joint. All blocks shall be coated on the edges with a grit-bearing, water-and-alkaline-resistant plastic material.

PATTERNS—SIZES—SHAPES . . . shall be as shown on the drawings or as specified hereunder: (Indicate PC patterns, sizes and shapes, and locations.)

EXPANSION JOINT MATERIALS . . . where shown or required, shall be PC Expansion Strips as furnished by Pittsburgh Corning Corporation.

ASPHALT EMULSION . . . where shown or required, shall be PC Asphalt Emulsion as furnished by Pittsburgh Corning Corporation.

WALL TIES . . . shall be PC Wall Ties of steel double wire mesh formed of two parallel wires (No. 9 gage) 2 in. on centers with electrically welded cross wires (No. 14 gage) at regular intervals, and shall be galvanized. Wall ties shall be installed in horizontal mortar joints of all glass block panels as follows:

- For $5\frac{3}{4}$ " size blocks—Every four courses.
- For $7\frac{3}{4}$ " size blocks—Every three courses.
- For $11\frac{3}{4}$ " size blocks—Every course.

Wall ties shall run continuously with ends lapped not less than 6 in. and shall run from end to end of panel. Wall ties shall not bridge expansion joints.

WALL ANCHORS . . . where shown on drawings shall be PC Wall Anchors as furnished by the Pittsburgh Corning Corporation and shall be No. 20 gage perforated steel strips 24 in. long by $1\frac{1}{4}$ in. wide galvanized after perforating. All wall anchors must be crimped within expansion joints, and shall generally be placed in the same joint as wall ties and must be completely embedded in the mortar joint of the glass block panels.

MORTAR . . . shall be one (1) part Portland cement, one (1) part lime, and four (4) to six (6) parts sand, all measured by dry volumes, and *integral type waterproofer*, mixed to a consistency as stiff as will permit good working and shall be drier than for ordinary clay brickwork. For interior panels, the waterproofer may be omitted. Admixtures in the form of setting accelerators and anti-freeze compounds shall not be used.

NOTE: At the discretion of the architect or engineer, a mortar prepared from masonry cement of low volume change, incorporating metallic stearate type waterproofer, and mixed in accordance with manufacturer's recommendation may be specified as an alternate.

CEMENT . . . shall be Type I conforming to the Standard Specifications for Portland cement (A.S.T.M. Designation: C150-44).



CLOSED SPECIFICATIONS PC GLASS BLOCKS

Pittsburgh DATA SHEET HANDBOOK

PITTSBURGH CORNING CORP., PITTSBURGH

(Continued from Page 22)

LIME . . . shall be a high-calcium type* hydrated lime or masons' hydrate conforming to the Standard Specifications for Hydrated Lime for Structural Purposes (A.S.T.M. Designation: C6-44); or a well-slaked quicklime putty conforming to the Standard Specifications for quicklime for Structural Purposes (A.S.T.M. Designation: C5-26). Hydrated lime shall be soaked at least two (2) hours, and quicklime shall be slaked not less than forty-eight (48) hours and screened prior to use in mortar. Where lime in the form of putty is used, the amount specified shall be interpreted as the actual volume of putty.

*NOTE: Hydrated lime of the magnesia or dolomitic type may be used provided that not less than 92% of all active ingredients are completely hydrated.

SAND . . . shall conform with Standard Specifications for Aggregate for Masonry Mortar, Intermediate Grading (A.S.T.M. C144-44), but shall contain particles of such size that not more than twelve (12) per cent by weight shall pass a No. 100 mesh sieve, and one hundred (100) per cent shall pass through a No. 8 mesh sieve as defined therein.

WATERPROOFER . . . shall be Pittsburgh Plate Glass Co. type NV-3389 (metallic stearate type). It shall be added to the mortar at the time of mixing and in the proportion recommended by the manufacturer, except where a waterproof Portland cement or prepared masonry mortar is used. In the latter cases, no waterproofer shall be added at the time of mixing.

OAKUM . . . where indicated on drawings or required for lateral cushioning of glass block panels at jambs and head chases, shall be of non-staining type treated to prevent dry rot, and shall be subject to the approval of the architect or engineer.

CALKING . . . mastic calking compounds as approved by the architect shall be applied evenly and to the full depth of recess provided at both interior and exterior perimeters of all glass block panels.

FLASHINGS. Unless otherwise specified, contractor shall furnish and install in locations shown or where required, flashings as are necessary to provide a complete installation.

INSTALLATION. Sills shall be heavily coated with asphalt emulsion which shall be allowed to dry for at least two hours before mortar is placed. Expansion joint strips shall be adhered to the jambs and head with asphalt emulsion, and shall run continuously in the expansion space, and must rest directly on the sill.

All mortar joints must be completely filled with mortar and *shall not be furrowed*. Mortar must not bridge across expansion joints. Blocks shall be laid up plumb, true to line, and with one-quarter ($\frac{1}{4}$) in.* visible width mortar joints. While mortar is still plastic and before final set, the joints shall be compressed to a depth necessary to expose the corners of the blocks as sharp, clean lines, and joints shall immediately be tooled slightly concave and smooth. The number of courses of glass blocks laid in successive lifts shall be limited to prevent compaction of joints.

*Unless otherwise specified.

CLEANING. While mortar is still plastic and before final set, this contractor shall clean off all mortar and foreign material from the glass block surfaces. Final cleaning shall be done by others, after mortar has reached its final set.

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